UNITED NATIONS ENVIRONMENT PROGRAMME

ENVIRONMENT ASSESSMENT PROGRAMME

TECHNICAL REPORT

A SURVEY OF GEOGRAPHIC INFORMATION SYSTEM AND IMAGE PROCESSING SOFTWARE 1995

UNITED NATIONS ENVIRONMENT PROGRAMME

UNEP

FOREWORD

GRID, the Global Resource Information Database, was established in 1985 as a part of the environmental assessment activities of the United Nations Environment Programme (UNEP). GRID is dedicated to making environmental information more readily accessible to environmental analysts as well as international and national decision makers. Besides acquiring and disseminating integrated, spatially-referenced environmental data, GRID provides decision support services to environmental analysts and decision makers worldwide, and fosters the use of Geographic Information System (GIS) and satellite Image Processing (IP) as tools for environmental analysis.

In order to assist resource managers and environmental planners in selecting and procuring GIS and IP software systems, GRID conducts a worldwide biennial survey of GIS and IP software systems. This survey was conducted in 1991 and 1993, and the results were published and distributed freely among UN organizations, international aid agencies, national governments, and other organizations interested in GIS and IP technologies. In keeping with the original intent of providing current, updated information, the survey was repeated in 1995 and the results are presented here.

The survey was conducted by Caroline Fenno. Gene Fosnight, Dawn Buehner, LuAnne Pfeifle and Linda Black provided support in compiling and finalizing this report. An electronic version of the report is available on the Internet at the following address: http://grid2.cr.usgs.gov/grid/grid.html. The support provided by the National Aeronautics and Space Administration (NASA) and the United States Geological Survey (USGS), EROS Data Center, is gratefully acknowledged.

Ashbindu Singh
Regional Coordinator
UNEP Environment Assessment Programme
for North America

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We regret any errors or omissions that we may have unwittingly made.

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1 . INTRODUCTION

1.1 Geographic Information Systems (GIS)

The concepts behind GIS technology were developed decades ago in the use of transparent map overlays for examining spatial relationships between features on maps of differing thematic emphasis. The use of computers for processing map data was pioneered at the Harvard School of Landscape Design during the mid 1970s.

The development of GIS marks a major transition in the use of computers for processing data. Computers were invented to process numbers and solve mathematical problems. Shortly thereafter techniques of encoding letters as sequences of numbers allowed computers to be able to process words and documents. The advent of GIS was marked by the development of methods for modeling and manipulating spatial information and relationships using computers. Early GIS software was developed on mainframe computers. With the increased speed, sophistication, and storage capacities of computers—especially minicomputers, workstations, and personal computers—GIS software has been migrating to more accessible levels of technology. Thus, GIS capabilities are now within reach of anyone who has work to do that involves the manipulation and/or analysis of spatial data.

Even though GIS technologies have been evolving for nearly 30 years, an agreed upon definition of GIS still eludes us. Probably the best definitions are sufficiently broad to allow for substantial latitude in interpretation. All GIS professionals recognize that, to be a GIS, a system must handle spatial data. However, more elaborate definitions such as a computer-based information system that allows capture, verification, storage, retrieval, analysis, update, and output of data which are spatially referenced to the Earth (geo-referenced), may help to clarify (slightly) what a GIS might be.

The basic hardware elements of a GIS include (1) a spatial data input device such as digitizing tablet or raster scanner; (2) a central processing unit (CPU); (3) a visual display device for interaction and visual analysis; (4) disk storage capability for data storage; and (5) an output device such as plotter or printer. In addition to having the software necessary for manipulating, searching, and analyzing spatial data, a GIS must also include software for driving the input and output devices listed above.

In this context, some general functional capabilities of GIS typically include map digitizing, digital map editing, topological structuring, map display and query, map projection, network flow analysis, vector overlay analysis, buffer generation, cell-based modeling, surface modeling, map composition, and hardcopy output.

Because of the general emphasis of GIS on the processing, manipulation, and analysis of spatial data, and because so many human activities occur and have effects in the spatial domain, GIS technologies are applied in a wide variety of fields such as agriculture, land use planning, wildlife conservation, forestry management, fisheries, geology, archeology, hydrology, urban planning, environmental management and monitoring, climate change studies, and others. Since most environmental and natural resource data have locational references, GIS technologies have enormous potential in facilitating sound management of natural resources and the environment.

1.2 Image Processing Systems

Interest in digital image processing can be traced back to the 1920s when digitized pictures of world events were first transmitted by submarine cable between New York and London. However, it was

not until the 1960s that applications of digital image processing techniques became widespread. This decade was marked by substantial increases in digital computing capacities and the establishment of the U.S. space program. This combination of events led to rapid growth in the development of systems for processing the imagery that was coming out of the space program. Since then, the continued exponential increases in speed and storage capacities of computers has greatly accelerated improvements in accessibility, performance, and sophistication of image processing systems.

As with GIS, image processing systems work with data that have a substantial spatial component. The spatial information in images is, however, not explicitly encoded in the data. Rather, it is inferred from the proximate relationships of the picture elements (pixels) to each other. The capabilities for processing image data are now also within reach of anyone who has serious work that involves the manipulation of digital image representations of real world phenomena.

The definition of an image processing system is probably even less clear than that of a GIS, as the applications of image processing are even more broad. Image processing applications cover the spectrum ranging from handwritten character recognition to land cover mapping. For purposes of this survey, however, an implicit assumption was made to constrain the definition of image processing systems. Image processing systems in this context must have been designed primarily to manipulate and analyze image data derived from earth-looking satellite or airborne sensors.

At the heart of any image processing system is the computer's central processing unit. Special purpose computers have been built that contain array processors for performing parallel computations. However, most readily available image processing software has been targeted towards more general purpose computer platforms such as workstations and personal computers. Other hardware components of a complete image processing system include (1) an input device such as a tape or disk drive; (2) a display device for interaction and visual analysis; (3) vast quantities of disk storage capacity as images can get very large; and (4) an output device such as a plotter or printer. The final component of an image processing system is the software that drives all of these devices and performs the various image manipulation algorithms used to aid in the extraction of information from the image data.

In this context, some general functional capabilities of image processing systems typically include interactive display, image enhancement, geometric rectification, spatial filtering, image mosaicking, fourier analysis, radiometric corrections, multi-variate analysis, raster-gis modeling, radar geocoding and analysis, image annotation, and hardcopy output.

Digital image processing techniques have been and are being used in a variety of applications including geology, petroleum exploration, archeology, physics, astronomy, biology, nuclear medicine, electron microscopy, law enforcement, defense, natural resource monitoring, environmental assessment, and others. The applicability of image processing technologies for monitoring, mapping, and managing natural resources and for monitoring various environmental phenomena using satellite derived imagery cause these technologies to be of particular interest to environmental and natural resource agencies and institutions.

1.3 Other Spatial Data Systems

While this survey was intended to focus on GIS and IP systems, it was anticipated that some of those surveyed would offer products in one of the closely related fields of Automated Mapping and Facilities Management (AM/FM) or Computer Aided Design (CAD). Both are closely related to GIS, but are much more limited in scope and application.

AM/FM systems are generally less sophisticated than full scale GISs in their capabilities for manipulating spatial data and analyzing relationships between elements. AM/FM systems are often used by utility companies to record and keep track of power lines, gas lines, valves, meters, land, etc. One of their primary purposes is to make the task of producing maps of facilities easier. The more sophisticated systems allow for modeling connectivity and flow, among other things.

While CAD systems are used to model entities that occur in space, the geometric nature of these entities is generally far more simple than many of the real world phenomena that are modeled in a GIS. CAD systems typically deal with geometry that contains many horizontal and vertical lines, regular angles, circular and other smooth curves, etc. GIS systems, on the other hand, deal with lines of a fractal nature, such as coastlines and contours. And in terms of spatial relationships, topology is more important in GIS than in CAD.

Thus, while the similarities between GIS, AM/FM, and CAD are many, the differences are also quite significant. It is important that the reader be aware of these differences, when trying to match a system to both present and anticipated future needs.

2. OBJECTIVES AND SCOPE OF SURVEY

The objectives of this survey are much the same as they were in 1993: to provide potential users of GIS and IP software with basic information about what systems are available, something about the capabilities of these systems, and to provide references for obtaining more detailed information on the various systems. It is intended to be somewhat of an introductory "buyers-guide" to GIS and IP software systems. An additional objective was to do a comparative analysis between years in an attempt to identify trends or advances in the GIS and IP software industries. This survey is not unique in this regard. Others have and will continue to perform similar surveys and produce similar reports. Examples include:

"**A survey of Geographic Information Systems - for natural resources decision making, 1987**," The American Farmland Trust, Washington, D.C.

"**Directory of Geographic Information Systems and Related Products and Services 1990**," Earth Observation Satellite Company (EOSAT), Maryland, U.S.A.

"**The 1995 International GIS Sourcebook**" (updated annually since 1989), GIS World, Ft. Collins, Colorado, U.S.A.

However, audiences for each of these tend to be quite different, and most publications are not readily available to environmental agencies and institutions in developing countries.

3. SURVEY METHODOLOGY

The questionnaire was slightly reformatted for the 1995 survey, and it was mailed to 332 companies and institutions in 28 countries that were believed to be distributing either GIS, IP, or related software systems. The list of survey recipients was derived from a list of vendors used for the 1993 survey with additions from the 1995 International GIS World Sourcebook's listing of software vendors and a few additions from personal contacts within the GRID system. The questionnaire was also also designed in HyperText Markup Language (HTML) so that respondents could view and respond to

it on the World Wide Web (WWW) at Uniform Resource Locator (URL) http://grid2.cr.usgs.gov/grid/survey.html. The WWW page was created to increase the level of participation or response rate among the recipients of the questionnaire by providing another means to participate in the survey.

As in 1993, the questionnaire was designed to elicit information about the general characteristics, operating environments, supported peripherals, and functional capabilities of the software systems. It was designed with the idea that developing country personnel would be the primary consumers of the information being collected, and at the same time keeping in mind that the survey should be as little of an inconvenience as possible to those who are tasked with completing the questionnaire. A copy of the questionnaire has been included in Appendix B.

Of the 332 organizations to whom the questionnaire was sent, 64 organizations responded without any extra prompting. In addition, four companies which were *not* on our mailing list noticed our survey on the WWW and responded to it. However, about 66% of the organizations that responded in 1993 did not respond in 1995. In the interest of doing a comparative analysis between the 1995 and 1993 results, some extra effort was made to encourage a response from these particular recipients. A simple reminder along with another copy of the questionnaire was faxed to these organizations after the stated deadline for responding had past. This extra effort resulted in only three more responses coming in.

4. RESULTS OF THE SURVEY

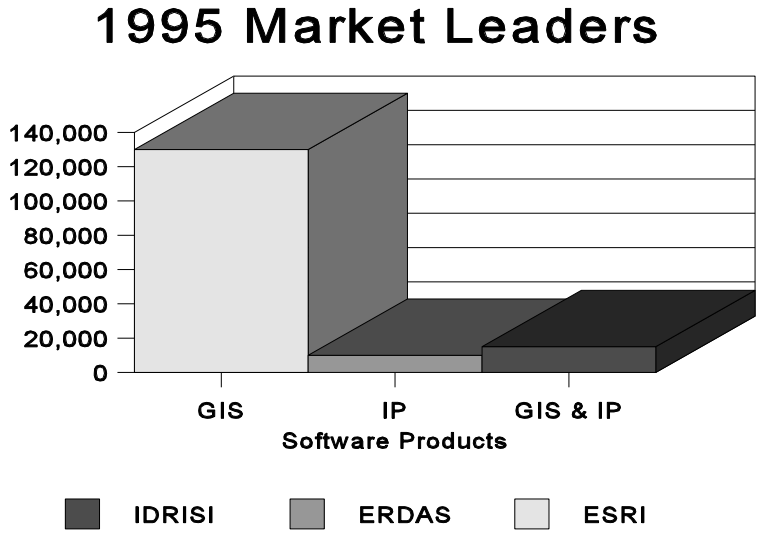
The responses to the questionnaire have been included in their entirety in Appendix C of this report. The only exceptions being when respondents sent official product and/or company brochures; it was simply not feasible to include this information in the report. Interested readers are encouraged to contact the organizations directly for such detailed information. The complete responses in Appendix C are organized in the same manner that the results are presented in Summary Table - 1995 Responses.

The Summary Table was designed to give the reader a comparative look at the various products. The information presented in the table is deemed to be some of the most important high level information that prospective buyers may use to quickly sort through the various products to narrow their field of search. The table is organized alphabetically by product name. Once the preliminary evaluations have been made at this high level, the reader can turn to Appendix C for more specific and detailed functional and descriptive information about the various products. And finally, if the reader desires even more information, it can be obtained through the organizational contacts also contained in Appendix C.

5. SURVEY FINDINGS/OBSERVATIONS

5.1 Number of Responses

A total of 62 organizations from 14 countries offering GIS, IP, or closely related software products responded to the survey with widely varying levels of completeness. Another 4 organizations offering complementary software products responded to the survey; they have been included in Appendix A of this report. In addition, 5 organizations that engage in consulting services related to GIS and IP responded with a desire to obtain a copy of the completed report.



Of the 65 organizations that responded to the survey in 1993, only 23 responded again in 1995. In addition, only 7 organizations have replied to the survey consistently since its beginning in 1991. It would only be a matter of conjecture as to why many organizations have not responded.

5.2 Number of Installations

The total number of licensed users of GIS and IP software reported by the respondents to the 1995 survey is 221,981. An analysis of the figures regarding the distribution of licensed users by continent reveals that approximately 52% of the installations are in North America, 25% in Europe, 9% in Asia, 6% in South America, 5% in Australia, and 3% in Africa. (See Appendix A.)

5.3 Industry Growth

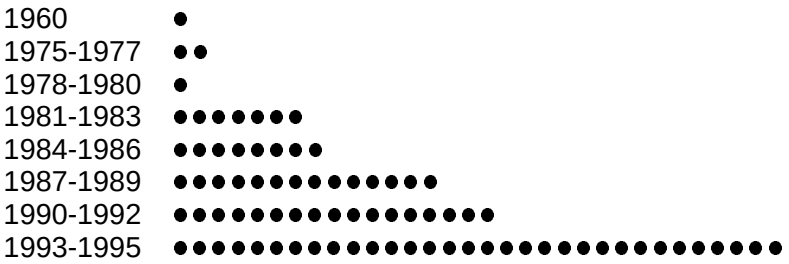
Because of the differences in both the numbers and identities of the organizations that responded to the survey, it is a bit of a challenge to compare results between years. By comparing the total number of installations reported by the 23 organizations that responded to both surveys, one might conclude that the number of users has increased by almost a factor of three (62,514 to 166,368). A closer look at the responses reveals that when we excluded the number of Environmental Systems Research Institute's (ESRI) product installations from the comparison, the number of installations increased only 1.3 times from 1993 to 1995 (26,097 to 36,368). Keep in mind that these figures are just a comparison of the 23 organizations that responded in both 1993 and 1995. Overall, the number of installations among the organizations that responded in 1995 compared to those that responded in 1993 has increased significantly (91,009 to 221,981).

5.4 Market Leaders

As was shown in the previous surveys, ESRI is still clearly the market leader in GIS software products, in terms of number of installations (130,000 reported) worldwide. In the area of full featured image processing systems, ERDAS is still the leader with 10,000 installations. And for both basic GIS and IP capability at a low price, IDRISI's product for PCs is still the leader with 15,000 installations. The number of installations varies a great deal from vendor to vendor. These market leaders represent the high end of the spectrum. On the other end, some relative newcomers reported having as few as one installation at the time the survey was completed.

5.5 New Product Introductions

Since GIS and IP technologies are still relatively young, many companies are introducing new products at a fairly rapid pace. A look at the distribution of products by year of first installation reveals the significant increase in number of offerings since the latter half of the '80s. The distribution by year of first installation follows:



5.6 Functionality and Price

The software systems represented in this survey vary widely in their functional capabilities as well as in their prices. More than 70 percent of the respondents indicated that their products include GIS functionality, about a third consider their products to be IP systems, approximately 10 percent offer some form of AM/FM system, and almost half offer either CAD or some other GIS or IP related software. Some systems offer a broad range of both GIS and IP functionality, others specialize in one of these two major functional areas, while still others have much more specialized market niches. There is not necessarily a direct relationship between functional capability and price. The commercial products range in price from a few hundred dollars to a few thousand and even up to several tens of thousands of dollars. There are also a couple of very capable systems that are in the public domain; however, support may be limited.

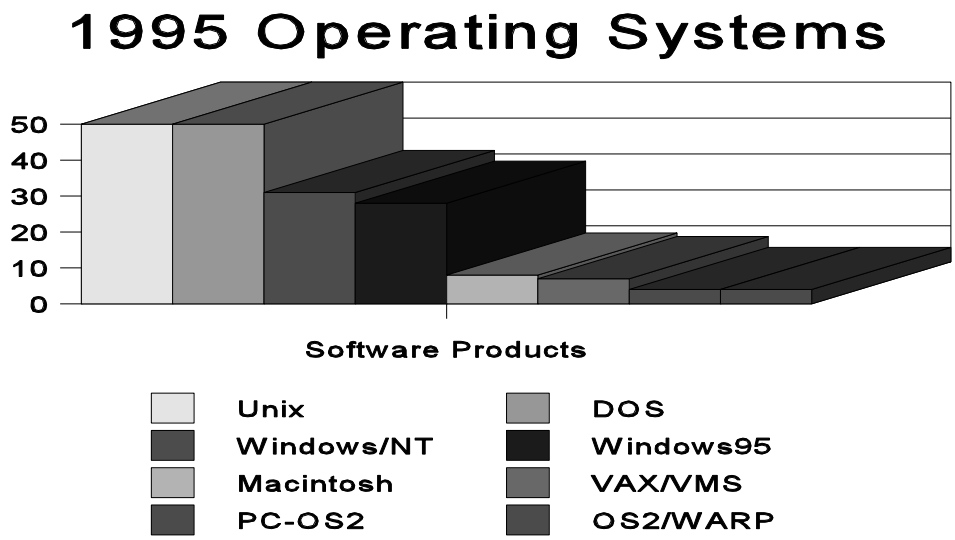
5.7 Technical Features

Technical sophistication of the software products included in this survey can also vary widely. About 20 percent of the systems are purported to have an expert system capability built into them; over 50 percent indicated having an object-oriented software architecture; 75 percent claim to utilize a spatial index to improve efficiencies; approximately 75 percent report to having an integrated data base management system (DBMS); and almost 90 percent report to having the capability to link to an external DBMS. In addition to the built in functionality of the systems, approximately 60 percent offer linkable libraries for data structure access,allowing users to write their own application software utilizing the same data structures; and source code can be obtained for about 20 percent of the systems. The responses to questions about source code and linkable libraries indicate that C is the language of choice for developing GIS and IP systems. While C++ is becoming a very popular language also, there is a noticeable decrease in the use of FORTRAN.

5.8 Turnkey Systems

A little more than half of the vendors responding to the survey are willing to provide turn-key solutions (bundled hardware and software) for their clients. Some offer standard packages, while others prefer to tailor the configuration to a user's specific needs.

5.9 Software Support



More than 80 percent of the organizations that responded to the survey indicated that they offer worldwide software support for their products. Almost all of the remainder offer support for a limited portion of the world. Only a couple of respondents indicated that no support is available.

5.10 Training Assistance

About 90 percent of the organizations responding to the survey offer training courses for their clients, about 85 percent offer training assistance in the form of courses, almost half offer tutorials, and about 6 percent offer training videos for their products.

5.11 Operating Systems

The most common operating systems supported for the various products were Unix and Microsoft DOS, with about 50 software products offered on each. Windows/NT and Windows/95 (a newly released operating system) were the third and fourth most offered with 31 and 28 products each, respectively. Apple Computer Corporation's Macintosh was a distant fifth with 8 products offered on it, Digital Equipment Corporation's (DEC) VMS was sixth with 7 products, and International Business Machine's (IBM) OS2 and OS2/WARP were reported to support 4 products each. The most readily apparent trend since the 1993 survey was an increase in Windows operating systems that are offered, especially since the arrival of Windows/95. Unix and DOS were both represented in similar proportions in 1995 as in 1993.

5.12 User Interfaces

The trend towards windows based applications and graphical user interfaces throughout the software industry is occurring with GIS, IP, and related applications. While almost a third of the products have simple command line interfaces, more than 75 percent of the products have a menu based interface. Some products apparently have more than one type of user interface.

5.13 On-line Help

Nearly all of the systems (approximately 90%) offer some form of on-line help. Almost half of the products have a context sensitive help facility, and about one-third have basic on-line help. About

a third of the products are reported to have a full hypertext help facility incorporated into the software system. Some of the systems have more than one type of help facility included.

5.14 Documentation

While users' guides and related documentation have traditionally been distributed in hard copy form, more than half of the respondents indicated that their documentation is available in electronic and hard copy form. Approximately one-third offer only hard copy documentation, and six respondents only an electronic version. Almost all vendors offer an English version of their software documentation. About one-fourth of respondents offer a French version, a little more than 10% offer a German version, approximately 10 percent offer Spanish, and even fewer respondents offer documentation in languages such as Swedish, Italian, Dutch, Japanese, Portuguese, Danish, Greek, and Russian.

6. CONCLUSIONS

It is hoped that this survey provides a fairly comprehensive look at the worldwide offerings in GIS and IP software systems. The number of respondents was down from 65 in 1993 to 62 in 1995. And by including the 41 that responded in 1993 but not 1995, this report covers GIS, IP, and related software products offered by 103 different organizations from at least 19 different countries around the world. From the results of this survey, it is quite apparent that the proliferation of GIS and IP technologies is continuing at a very rapid pace—predominantly in North America and Europe. As of late 1995, there were reported to be approximately a quarter of a million installations of GIS, IP, or closely related software systems worldwide.

This report is intended to provide basic information about GIS and IP systems along with names, addresses, and phone numbers of the organizations that provide these systems to potential users in the developing world. No attempt was made to evaluate the functional capabilities of the systems nor to perform benchmark tests of the systems. All the product specific information contained in this report was compiled based on replies received from software vendors. UNEP/GRID takes no responsibility for inaccuracies that may have been present in the vendor responses. It is not recommended that any purchasing decisions be made based solely on the information contained herein. Potential users should contact the software vendors directly for more detailed information as necessary.

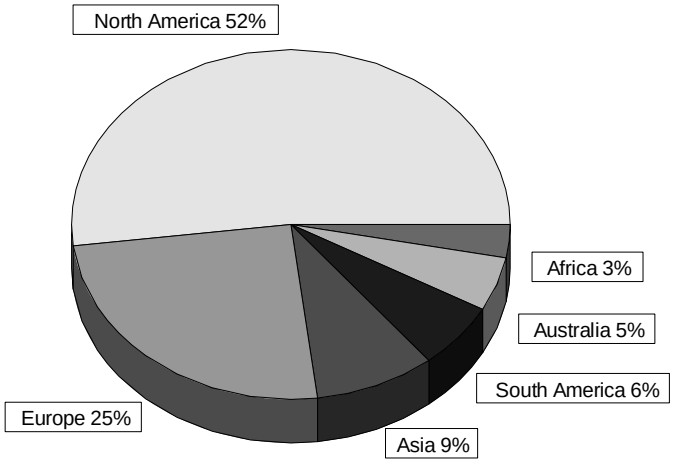
SUMMARY TABLE - 1995 RESPONSES

APPENDIX A

1995 AND 1993 GIS & IP INSTALLATIONS

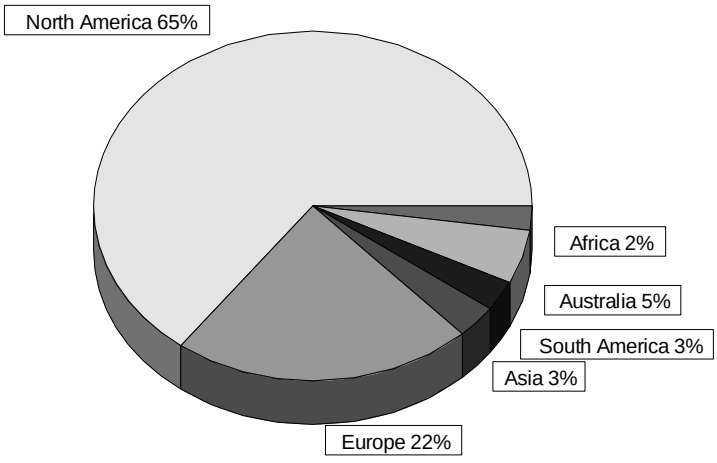
1995 Survey: Number of Installations

(221,981 Reported Licensed Users)



1993 Survey: Number of Installations

(93,898 Reported Licensed Users)



APPENDIX B

COMPLEMENTARY PRODUCTS

COMPLEMENTARY PRODUCTS

A few companies offering products that are complementary to GIS and IP systems responded to the questionnaire. While it was not appropriate to intermix these products with the others in the tables, neither did it seem appropriate to leave them out completely. Thus, they are presented here in very brief form, and the reader is encouraged to contact these vendors directly if more information is desired.

Geographic Data Technology, 11 Lafayette St., Labanon, NH, USA, 03768, phone 800-331-7881 x1124. Contact Donald Crolee. They sell map databases.

Harrison Resource Corporation, 760 Whalers Way, Suite A-200, Fort Collins, CO, USA, 80525, phone 800-447-6155, fax 970-226-6300, e-mail 75277.1250@compuserve.com. Contact Randy L. Majors. They sell 120 layers of Colorado data, (demographic, topographic, natural resource, hydrographic, physical feature, legal boundary, environmental hazards, general reference, buffer, solution).

Lenzar Electro-optics, 3960 RCA Blvd., #6001, Palm Beach Gardens, FL, USA, 33410, phone 407-775-2600, fax 407-775-9100, e-mail lenzar@gate.net. Contact Elena Penta. They sell a digitizing scanner (LENZPRO 2001) for Unix operating systems.

Tele Atlas, Moutstraat 42, 9000 Gent, Belgium, phone 32-9-222-56-58, fax 32-9-222-74-72, e-mail info@teleatlas.be. Contact Anne Marie Vanden Berghe or Ad Bastiaansen. They offer many digital maps (StreetNet, StreetMap, RoadNet, BoundaryMap.

APPENDIX C

QUESTIONNAIRE

UNITED NATIONS ENVIRONMENT PROGRAMME
GLOBAL RESOURCE INFORMATION DATABASE

Geographic Information Systems (GIS) and Image Processing (IP) Systems Survey, 1995

Please return a completed questionnaire for each product to Caroline Fenno, UNEP/GRID, EROS Data Center, Sioux Falls, SD, 57198, USA.
Direct questions/comments to Caroline Fenno at cfenno@grid2.cr.usgs.gov (e-mail), or 605-594-6064 (voice) or 605-594-6529 (fax).

PRODUCT NAME: _____

COMPANY/ORGANIZATION

Company Name: _____

Contact Person(s): _____

Street Address: _____

City, State: _____

Zip, Country: _____

Phone: _____

Fax: _____

Email: _____

1. **Type of product:**

   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**

   ♢ **Public Domain:**

   Costs for Distribution/Documentation:_____

   ♢ **Commercial Product**

   Licensed by: ❑ User ❑ System ❑ Site ❑ Other:_____

   License fee is: ❑ One Time Charge ❑ Other Charge:_____

3. **Turnkey system available (bundled hardware & software):** ♢ Yes ♢ No

4. **Basic (minimal) software system cost:**_____

5. **Complete (fully capable) software system cost:**_____

USER BASE

6. **Total number of licensed users:** _____
7. **Number of licensed users by continent:**
   Africa: _____
   Asia: _____
   Australia: _____
   Europe: _____
   North America: _____
   South America: _____
8. **Year of first installation:** _____

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ❑ Tutorials ❑ Other: _____
10. **Software support available:** ❑ Worldwide ❑ Not Available ❑ Other: _____
11. **Cost of support:** ❑ Included in License ❑ Other: _____
12. **Software updates:** ❑ Annually ❑ Semiannually ❑ Other: _____
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ❑ Other: _____

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ❑ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ❑ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other: _____
16. **Online help:** ❑ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other: _____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95 ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP ❑ VAX/VMS ❑ Other:_____

If UNIX/X-Windows, list vendors and window managers supported:_____

_____

_____

19. Minimum hardware configuration:_____

_____

_____

20. Devices supported: (Please list)

	INPUT	**OUTPUT**
❑ Digitizers:	_____	
	_____	
❑ Frame Grabbers:	_____	
	_____	
❑ Scanners:	_____	
	_____	
❑ GPS:	_____	
	_____	
❑ CD-ROM:	_____	
	_____	
❑ Diskette:	_____	_____
	_____	_____
❑ Tape:	_____	_____
	_____	_____
❑ Displays:		_____
		_____
❑ Film Recorders:		_____
		_____
❑ Electrostatic Plotters:		_____
		_____
❑ Pen Plotters:		_____

❑ Ink Jet Printers: _____

_____

❑ Laser Printers: _____

_____

❑ Others: _____ _____

_____ _____

21. Source code available: ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other: _____

♢ No

22. Batch capability: ♢ Yes ♢ No

23. Linkable libraries for data structure access: ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN

❑ Pascal ❑ Other: _____

♢ No

24. Integrated Data Base Management System: ♢ Yes ♢ No

25. Data Base File Types Supported: ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph

❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress

❑ Sybase ❑ Other: _____

26. Data Exchange Formats Supported: _____

27. If GIS Product: ❑ Vector ❑ Raster

28. GIS Functionality:

❑ Map Digitizing ❑ Map Display & Query

❑ Digital Map Editing ❑ Change Map Projections

❑ Topographical Structuring ❑ Datum Changes

❑ Network Flow Analysis ❑ Vector Overlay Analysis

❑ Cell-based (Raster) Modeling ❑ Surface Modeling

❑ Map Composition/Generation ❑ Buffer generation

❑ Raster-Vector Conversion ❑ Line-of-Sight Analysis

❑ Edgematching ❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display ❑ Image Enhancement

❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ♢ Yes ♢ No

31. Expert system capability: ♢ Yes ♢ No

32. Spatial index supported: ♢ Yes ♢ No

33. Object Oriented Architecture: ♢ Yes ♢ No

Please describe additional features:_____

APPENDIX D

SURVEY RESPONSES

PRODUCT NAME: ACTIONPLAN

COMPANY/ORGANIZATION

Company Name: Action Information (Management) Ltd.
Contact Person(s): John Page
Street Address: Ashton Road
City, State: Hilperton, Nr. Trowbridge, Wiltshire
Zip, Country: BA14 7SZ UK
Phone: 44-01225-751616
Fax: 44-01225-751616
Email: N/A

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other: To suit requirements
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** £900 (sterling)
5. **Complete (fully capable) software system cost:** £16000 (sterling)

USER BASE

6. **Total number of licensed users:** 150
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 150
   North America:
   South America:
8. **Year of first installation:** 1988

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: Support contract available
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ❑ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:

16. Online help: ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A

17. User interface: ❑ Command Line ❑ Menus ■ User-Customizable Menus
■ User-Generated Macros ■ Other: Touch screen buttons user customizable

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ■ Other: PC-DOS only

19. Minimum hardware configuration: IBM compatible 486 66MHZ PC with 16MB RAM

20. Devices supported:

	INPUT	OUTPUT
❑ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
■ GPS:	Various	
■ CD-ROM:		
■ Diskette:	3.5 inch	
❑ Tape:		
■ Displays:		SVGA monitor, optional touch screen
❑ Film Recorders:		
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
■ Ink Jet Printers:		HP compatible HPGL and HPGL supported
■ Laser Printers:		HP and others
❑ Others:		

21. Source code available: ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:
◆ No

22. Batch capability: ◆ Yes ♢ No

23. Linkable libraries for data structure access: ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:
◆ No

24. Integrated Data Base Management System: ◆ Yes ♢ No

25. Data Base File Types Supported: ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: Action Information (Management) Ltd.'s proprietary database format

26. Data Exchange Formats Supported: not reported

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing	■ Map Display & Query
❑ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: ActionPlan offers fast display and intuitive operation. As Windows becomes universally accepted it is anticipated that the DOS based Action Plan will be superceded by ActionPlan for Windows.

PRODUCT NAME: A.L.I.C.E. - CASTASTO STRADE

COMPANY/ORGANIZATION

Company Name: EL.DA.INGEGNERIA S.P.A.
Contact Person(s): not reported
Street Address: Via Damiano Chiesa, 5
City, State: Treviso
Zip, Country: TV31100, Italy
Phone: 39-422-411160
Fax: 39-422-411217
Email: MC 7192@mclink.it

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** not reported
5. **Complete (fully capable) software system cost:** not reported

USER BASE

6. **Total number of licensed users:** not reported
7. **Number of licensed users by continent:** Africa:_____
   Asia:_____
   Australia:_____
   Europe:_____
   North America:_____
   South America:_____
8. **Year of first installation:** not reported

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:_____
10. **Software support available:** ❑ Worldwide ❑ Not Available ❑ Other: not reported
11. **Cost of support:** ❑ Included in License ❑ Other: not reported
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:_____
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:_____

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Italian
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: AIX/MOTIF; SUN
19. **Minimum hardware configuration:** not reported
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
❑ Frame Grabbers:	_____	
■ Scanners:	_____	
■ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
■ Displays:		_____
■ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ■ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	❑ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: not reported

PRODUCT NAME: **ALK-GIAP** as a component of the ALK/ATKINS system

COMPANY/ORGANIZATION

Company Name: Surveying and Mapping Agency NRW
Contact Person(s): Dipl-Ing. Düren
Street Address: Muffendorfer Straße 19-21
City, State: Bonn 53177
Zip, Country: Germany
Phone: 049-0228-846-480
Fax: 049-0228-846-502
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product** Please contact AED Graphics GmbH, Mallwitzstr. 1-3, 53177 Bonn
   Licensed by: ❑ User ■ System ■ Site ❑ Other: tel. 049-0228-95420
   License fee is: ■ One Time Charge ❑ Other Charge: fax 049-0228-9542111
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** please contact AED Graphics GmbH
5. **Complete (fully capable) software system cost:** not reported

USER BASE

6. **Total number of licensed users:** 850
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 850
   North America:
   South America:
8. **Year of first installation:** 1986

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: Germany
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ❑ English ❑ French
    ■ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ■ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: DEC, HP, IBM, SGI, SNI, SUN, MOTIF, Sunview
19. **Minimum hardware configuration:** Workstation
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		
■ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		
■ Ink Jet Printers:		
■ Laser Printers:		
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ❑ C++ ■ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other: ALK / ATKINS-DBMS, AED-IDB
26. **Data Exchange Formats Supported:** ALK / ATKINS - EDBS, TIFF
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	❑ Change Map Projections
■ Topographical Structuring	❑ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
■ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Object oriented data structure. Own object oriented programming language for data manipulation and presentation.

PRODUCT NAME: ALLIANCE

COMPANY/ORGANIZATION

Company Name: Icare International
Contact Person(s): Didier Coullet
Street Address: Prologue Voie No1, BP 2736
City, State: 31312 Labege Cedex
Zip, Country: France
Phone: 33-61-39-03-13
Fax: 33-61-39-25-34
Email: not reported

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ❑ Site ❑ Other: not reported
   License fee is: ❑ One Time Charge ❑ Other Charge: not reported
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $5000 ALLIANCE
5. **Complete (fully capable) software system cost:** $12,000 ALLIANCE + DTM + IP

USER BASE

6. **Total number of licensed users:** 150
7. **Number of licensed users by continent:**
   Africa: 20
   Asia:
   Australia:
   Europe: 130
   North America:
   South America:
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ■ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** PC RAM 16 MB
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
❑ Frame Grabbers:	_____	
■ Scanners:	_____	
■ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
❑ Tape:	_____	
■ Displays:		_____
■ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ♢ Yes ◆ No
23. **Linkable libraries for data structure access:** ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ♢ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ■ Paradox ❑ Progress
    ■ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** DXF, MIF, EOO
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
■ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
■ Filtering	❑ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: To meet the need of planning officers, agri-environmental project managers, ICARE INTERNATIONAL designed ALLIANCE; an easy to use Geographical Information System with Powerful analysis functions, Raster / Vector integration functions.

PRODUCT NAME: APIC

COMPANY/ORGANIZATION

Company Name: APIC S.A.
Contact Person(s): Pierre Tarif, Marketing Director
Street Address: Le Baudran, 25, Rue de Stalingrad
City, State: Arcueil
Zip, Country: 94724 Ceder, France
Phone: 33-1-49-69-90-90
Fax: 33-1-49-69-92-93
Email: Info@apic.fr

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** $12,000
5. **Complete (fully capable) software system cost:** $25,000

USER BASE

6. **Total number of licensed users:** 600
7. **Number of licensed users by continent:**
   Africa:
   Asia: 2%
   Australia:
   Europe: 95%
   North America:
   South America: 3%
8. **Year of first installation:** 1984

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: Maintenance contract available
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: IBM-AIX / HP-HPUX9 / DEC-ULTRIX / DEC-OSF1 / SUN-SOLARIS1 / SUN-SOLARIS2
19. **Minimum hardware configuration:** RAM 32 MB
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	All serial port	
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
❑ CD-ROM:		
❑ Diskette:		
❑ Tape:		
❑ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		HPGL2, Postscript
■ Pen Plotters:		HPGL2, Postscript
■ Ink Jet Printers:		
■ Laser Printers:		
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ■ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ■ Sybase ■ Other: Object-Oriented / Informix / Ingres
26. **Data Exchange Formats Supported:** EDIGEO / NTF / FED / DXF

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	■ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Multi-bases access (simultaneous access to several databases by one user).

PRODUCT NAME: ArcCAD

COMPANY/ORGANIZATION

Company Name: ESRI
Contact Person(s): Arun Rajarao
Street Address: 380 New York Street
City, State: Redlands, CA
Zip, Country: 92373, USA
Phone: 909-793-2853
Fax: 909-793-5953
Email: Info@esri.com (World Wide Web URL: http://www.esri.com)

1. **Type of product:**
   ■ GIS ❑ Image Processing ■ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   - ◆ **Commercial Product**
     Licensed by: ❑ User ❑ System ❑ Site ❑ Other: not reported
     License fee is: ❑ One Time Charge ❑ Other Charge: not reported
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◊ No
4. **Basic (minimal) software system cost:** Contact ESRI
5. **Complete (fully capable) software system cost:** Contact ESRI

USER BASE

6. **Total number of licensed users:** 10,000 +
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1992

SUPPORT/UPDATES

9. **Training available:** ■ Courses ■ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other: not reported
12. **Software updates:** ❑ Annually ❑ Semiannually ❑ Other: not reported
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ❑ Other: not reported

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ❑ Hardcopy ❑ Electronic Files

15. **Languages available:** ❑ Arabic ❑ Bengali ❑ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Language available through Auto CAD interface.

16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A

17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. **Minimum hardware configuration:** 4 - 8 MB RAM, 40 MB hard disk

20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	manual	
❑ Frame Grabbers:		
■ Scanners:		
■ GPS:		
❑ CD-ROM:		
■ Diskette:		
❑ Tape:		
❑ Displays:		
■ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		
■ Ink Jet Printers:		
■ Laser Printers:		
■ Others:	photogrammetric, COGO, mouse	dot matrix printer

21. **Source code available:** ♢Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. **Batch capability:** ♢ Yes ♢ No

23. **Linkable libraries for data structure access:** ♢ Yes: ❑ C ❑ C++ □ FORTRAN
❑ Pascal ❑ Other:_____
♢ No

24. **Integrated Data Base Management System:** ♢ Yes ♢ No

25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other: _____

26. **Data Exchange Formats Supported:** ARC, DXf, IGES, VPF

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
■ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: ArcCAD extends the AutoCAD data model to include complete GIS Functionality that many CAD users want and need. It fully integrates ARC/INFO functionality within the AutoCAD environment, presenting powerful GIS tools behind a familiar pull-down menu interface. ArcCAD supports Intel-based personal computers running DOS or Windows.

PRODUCT NAME: ARC/INFO

COMPANY/ORGANIZATION

Company Name: ESRI
Contact Person(s): Arun Rajarao
Street Address: 380 New York Street
City, State: Redlands, CA
Zip, Country: 92373, USA
Phone: 909-793-2853
Fax: 909-793-5953
Email: info@esri.com (World Wide Web URL: http://www.esri.com)

1. **Type of product:**
   ■ GIS ❑ Image Processing ■ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ❑ Other:
   License fee is: ❑ One Time Charge ❑ Other Charge: not reported
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** Contact ESRI
5. **Complete (fully capable) software system cost:** Contact ESRI

USER BASE

6. **Total number of licensed users:** 40,000 +
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1982

SUPPORT/UPDATES

9. **Training available:** ■ Courses ■ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other: not reported
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ❑ Other: not reported

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ❑ Hardcopy ❑ Electronic Files

15. **Languages available:** ❑ Arabic ❑ Bengali ❑ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Fully internationalized

16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A

17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
■ VAX/VMS ❑ Other:_____
If UNIX/X-Windows, list vendors and window managers supported: Data General, DEC, Hewlett-Packard, Intel, Silicon Graphics, Sun, IBM, NEC, Unisys

19. **Minimum hardware configuration:** 16 - 32 MB RAM, 600 MB hard disk

20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	manual	
❑ Frame Grabbers:		
■ Scanners:		
■ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		
■ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		
■ Ink Jet Printers:		
■ Laser Printers:		
■ Others:	photogrammetric, mouse, COGO	dot matrix printer

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. **Batch capability:** ◆ Yes ◊ No

23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ■ C++ ■ FORTRAN
❑ Pascal ■ Other:_____
◊ No

24. **Integrated Data Base Management System:** ◆ Yes ◊ No

25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ■ INFO ❑ Intergraph
❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
■ Sybase ❑ Other: DB2, Informix, Ingres, Rbase, SQL 400, Rdb (VAX), AS/400

26. Data Exchange Formats Supported: Arc, AVHRR, DLG, DXF, ERDAS, IGES, MOSS, TIGER, ASCII, others

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
■ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
■ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

Arc/Info can do all this with ERDAS Imagine.

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: ARC/INFO, ESRI's flagship software product, is a high-end GIS that consists of a complete geoprocessing toolbox for the automation, modification, management, analysis, and display of geographic information. (ARC/INFO has 8 extensions available: ARC/INFO NETWORK, ARC/INFO TIN, ARC/INFO GRID, ARC/INFO COGO, ArcExpress, ArcPress, ArcScan, ArcStorm.

PRODUCT NAME: PC ARC/INFO

COMPANY/ORGANIZATION

Company Name: ESRI
Contact Person(s): Arun Rajarao
Street Address: 380 New York Street
City, State: Redlands, CA
Zip, Country: 92373, USA
Phone: 909-793-2853
Fax: 909-793-5953
Email: Info@esri.com (World Wide Web URL: http://www.esri.com)

1. **Type of product:**
   ■ GIS ❑ Image Processing ■ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ❑ One Time Charge ❑ Other Charge: not reported
3. **Turnkey system available (bundled hardware & software):** ♦ Yes ◊ No
4. **Basic (minimal) software system cost:** Contact ESRI
5. **Complete (fully capable) software system cost:** Contact ESRI

USER BASE

6. **Total number of licensed users:** 15,000 +
7. **Number of licensed users by continent:** Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1987

SUPPORT/UPDATES

9. **Training available:** ■ Courses ■ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other: not reported
12. **Software updates:** ❑ Annually ❑ Semiannually ❑ Other: not reported
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ❑ Other: not reported

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ❑ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Fully internationalized

16. Online help: ■ Basic ■ Context Sensitive ■ Hypertext ❑ N/A

17. User interface: ■ Command Line ■ Menus ■ User-Customizable Menus
■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: not reported

20. Devices supported:

	INPUT	OUTPUT
■ Digitizers:	manual	
❑ Frame Grabbers:		
■ Scanners:		
■ GPS:		
❑ CD-ROM:		
■ Diskette:		
❑ Tape:		
❑ Displays:		
■ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		
■ Ink Jet Printers:		
■ Laser Printers:		
■ Others:		dot matrix printer

21. Source code available: ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◆ Yes ♢ No

23. Linkable libraries for data structure access: ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
♢ No

24. Integrated Data Base Management System: ◆ Yes ♢ No

25. Data Base File Types Supported: ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other: _____

26. Data Exchange Formats Supported: ARC, DLG, DXF, ERDAS, IGES, ISIF, MOSS, ASCII

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ❑ Topographical Structuring
- ❑ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ❑ Surface Modeling
- ■ Buffer generation
- ❑ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: PC ARC/INFO provides many of the functions of workstation-based ARC/INFO software in the PC computing environment under either a DOS or Windows operating system.

PRODUCT NAME: ArcView 2.1

COMPANY/ORGANIZATION

Company Name: ESRI
Contact Person(s): Arun Rajarao
Street Address: 380 New York Street
City, State: Redlands, CA
Zip, Country: 92373, USA
Phone: 909-793-2853
Fax: 909-793-5953
Email: Info@esri.com (World Wide Web URL: http://www.esri.com)

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: desktop mapping, GPS, geocoding

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ❑ One Time Charge ❑ Other Charge: not reported
3. **Turnkey system available (bundled hardware & software):** ♦ Yes ◊ No
4. **Basic (minimal) software system cost:** Contact ESRI
5. **Complete (fully capable) software system cost:** Contact ESRI

USER BASE

6. **Total number of licensed users:** 65,000 +
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1994

SUPPORT/UPDATES

9. **Training available:** ■ Courses ■ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other: not reported
12. **Software updates:** ❑ Annually ❑ Semiannually ❑ Other: not reported
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ❑ Other: not reported

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ❑ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ■ German ❑ Hindi ■ Japanese ❑ Mandarin
    ■ Portuguese ■ Russian ■ Spanish ■ Other:Danish, Dutch, Hungarian, Polish, Slovak, Swedish, Finnish, Norwegian, Croatian, Slovenian, Romanian, Greek, Latin, Turkish.
16. **Online help:** ■ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ■ Windows/NT ■ MacIntosh ■ PC-OS/2 ❑ OS/2 WARP
    ■ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Data General, DEC, Hewlett-Packard, Silicon Graphics, Sun, NEC, IBM.
19. **Minimum hardware configuration:** depends on hardware; Mac: System 7 or higher (Power Mac)
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
■ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
■ Others:	mouse _____	dot matrix printer _____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ■ INFO ❑ Intergraph

❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
■ Sybase ■ Other: Informix, Ingres, DB2, any ODBC-compliant system.

26. Data Exchange Formats Supported: DXF, DWG, SDTS, many others

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
■ Network Flow Analysis	❑ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: ArcView software is an easy-to-learn desktop mapping and GIS tool that enables users to quickly select and display different combinations of data and creatively visualize information. ArcView has proven to be extremely popular with novice and part-time users of geographic information.

PRODUCT NAME: Ascodes-3

COMPANY/ORGANIZATION

Company Name: JSInfo
Contact Person(s): P. Gaubert
Street Address: 8, rue de la Maison Rouge
City, State: Lognes
Zip, Country: 77185, France
Phone: 33-1-60-17-34-21
Fax: 33-1-60-17-27-58
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♦ Yes ◊ No
4. **Basic (minimal) software system cost:** $15,000 US
5. **Complete (fully capable) software system cost:** $45,000 US

USER BASE

6. **Total number of licensed users:** 273
7. **Number of licensed users by continent:** Africa: 17
   Asia: 3
   Australia: 0
   Europe: 250
   North America: 1
   South America: 2
8. **Year of first installation:** 1983

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: Included in maintenance contract
12. **Software updates:** ❑ Annually ❑ Semiannually ❑ Other: not reported
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ❑ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ■ Spanish ■ Other:_____
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ■ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: HP-UX; X Vision (Vision Ware)
19. **Minimum hardware configuration:** 32 MB RAM; 1 GB Hard Disk; 1280 x 1024 screen resolution.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Summagraphics; Aristo	
❑ Frame Grabbers:		
■ Scanners:	TIFF	
■ GPS:	ASCII	
■ CD-ROM:		
■ Diskette:		
■ Tape:	cartridges, DAT	
■ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		HPGL
■ Ink Jet Printers:		PCL
■ Laser Printers:		PCL
■ Others:	other graphic printers	

21. **Source code available:** ◊ Yes: ■ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other:_____
26. **Data Exchange Formats Supported:** coding and decoding features
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: The unique structure of the database includes geographic (3D and topologic), graphic (vector and raster), and alphanumeric information. Ascodes-3 controls TCP/IP links with external programs or Data Bases. All features, including advanced Cartography/Mapping capabilities (topographic or thematic), and the set of instructions queries (on spatial and alphanumerical attributes), are acceded either directly or via its user language.

PRODUCT NAME: ATLAS GIS

COMPANY/ORGANIZATION

Company Name: Scientific Software Group
Contact Person(s): Susan Hardy
Street Address: 11118 Sweetwood Lane
City, State: Oakton, VA
Zip, Country: 22124, USA
Phone: 703-620-9214
Fax: 703-620-6793
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ♦ Yes ◊ No
4. **Basic (minimal) software system cost:** US $500; International $800
5. **Complete (fully capable) software system cost:** Same as above

USER BASE

6. **Total number of licensed users:** not reported
7. **Number of licensed users by continent:**
   Africa:_____
   Asia:_____
   Australia:_____
   Europe:_____
   North America:_____
   South America:_____
8. **Year of first installation:** not reported

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:_____
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:_____
11. **Cost of support:** ■ Included in License ❑ Other:_____
12. **Software updates:** ■ Annually ■ Semiannually ❑ Other:_____
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: Each upgrade differs

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware** 386 with 4MB RAM
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ♢ No
23. **Linkable libraries for data structure access:** ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ♢ No
24. **Integrated Data Base Management System:** ◆ Yes ♢ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ■ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: any spreadsheet or dBase
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	■ Fourier Analysis
❑ Radiometric Corrections	■ Multivariate/Statistical Analysis
■ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Support for up to 250 map layers; built-in database manager links up to 250 tables to any geography; imports data from any dBASE-compatible database or spreadsheet; query support from either the data table or the map; sophisticated spatial analysis including area-weighted data aggregation-multiple buffer creation-combine features and associated data; map presentation tools including bivariate, shaded area, proportional fill or symbol and dot density theme types; 32 data ranges and eight ranging methods; edit titles, legends, scale bars and more on-screen; custom scripting tool using Visual Basic language (optional); extensive color palette and support for all Windows print drivers; friendly Windows interface with Button Bar, Toolbox and Status Bar. ATLAS GIS comes bundled with a large library of base maps, data and page layout templates such as Counties of the World, Capitals of the World, U.S. States, U.S. Counties, U.S. Interstate Highways, Canadian Provinces, and 3-Digit Zip Codes, among many others.

PRODUCT NAME: CARIS (Computer Aided Resource Information System)

COMPANY/ORGANIZATION

Company Name: Universal Systems Ltd.
Contact Person(s): Liz Kingston
Street Address: 270 Rookwood Avenue
City, State: Fredericton, NB
Zip, Country: E3B 2M2, Canada
Phone: 506-458-8533
Fax: 506-459-3849
Email: sales@universal.ca

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ❑ Other:
   License fee is: ❑ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♦ Yes ◊ No
4. **Basic (minimal) software system cost:** $635 US (CARIS for Windows)
5. **Complete (fully capable) software system cost:** $15,525 CARIS for UNIX

USER BASE

6. **Total number of licensed users:** 2200 +
7. **Number of licensed users by continent:**
   Africa: 110
   Asia: 198
   Australia: 132
   Europe: 550
   North America: 990
   South America: 220
8. **Year of first installation:** 1982

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ■ Arabic ❑ Bengali ■ English ■ French
■ German ❑ Hindi ■ Japanese ■ Mandarin
❑ Portuguese ■ Russian ■ Spanish ■ Other: Farsi

16. Online help: ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A

17. User interface: ■ Command Line ■ Menus ■ User-Customizable Menus
■ User-Generated Macros ■ Other: DDF link, MS Classes

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ■ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
■ VAX/VMS ■ Other: NEXT

If UNIX/X-Windows, list vendors and window managers supported: HP, Digital Equipment, SUN Silicon Graphics, Data General, 486 PC supporting SCO/ODT

19. Minimum hardware Windows: 12 MB RAM, 486-33 PC, 350 MB Diskspace, parallel port, serial port for digitizer/plotter, three button mouse; UNIX: 16 MB RAM, 200 MB Diskspace, three button mouse, serial ports for digitizers/plotters.

20. Devices supported:

	INPUT	OUTPUT
■ Digitizers:	Includes devices manufactured by Calcomp, Hewlett Packard,	
■ Frame Grabbers:	Houston, Versatec, Kongsberg, and Wild	
■ Scanners:		
■ GPS:		
■ CD-ROM:		
■ Diskette:		Output formats include HPGL, Postscript, Adobe Illustrator,
■ Tape:		HPGL2, and Versatec.
❑ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		
■ Ink Jet Printers:		
■ Laser Printers:		
❑ Others:		

21. Source code available: ◊ Yes: ■ C ■ C++ ❑ FORTRAN ❑ Pascal ❑ Other:
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◆ Yes: ■ C ■ C++ ❑ FORTRAN

❑ Pascal ❑ Other:_____

◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
■ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: Ingres, Informix

26. Data Exchange Formats Supported: DXF, DLG, SIF, TIFF, DIGEST, DX90

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ❑ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ■ Image Mosaicking
- ❑ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ■ Filtering
- ■ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ■ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: System development libraries, Object oriented toolkit libraries are also available for building extensive applications by the user.

PRODUCT NAME: CARTOCAD

COMPANY/ORGANIZATION

Company Name: Aerosul S/A
Contact Person(s): Mr. Eloy Allegretti or Mr. A.C. Bogo
Street Address: Av. Brasilia 5547
City, State: Curitiba - Parana
Zip, Country: 81020-010, Brazil
Phone: 041-346-3553
Fax: 041-246-2015
Email: None

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** US $3,500
5. **Complete (fully capable) software system cost:** US $3,500

USER BASE

6. **Total number of licensed users:** 250
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America: 250
8. **Year of first installation:** 1986

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ❑ Tutorials ■ Other: direct training
10. **Software support available:** ❑ Worldwide ■ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other:
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: 50% off

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ❑ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ❑ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
■ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A

17. User interface: ❑ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware 486 DX2, 66MHz.

20. Devices supported:

	INPUT	**OUTPUT**
■ Digitizers:	All	
❑ Frame Grabbers:		All Plotters
■ Scanners:	All	Available In
■ GPS:	All	The Market
■ CD-ROM:	All	
■ Diskette:	All	
■ Tape:	All	
■ Displays:		
■ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		
■ Ink Jet Printers:		All
■ Laser Printers:		
❑ Others:		

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other: Clipper

26. Data Exchange Formats Supported: DXF, TIFF

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
■ Map Composition/Generation
■ Raster-Vector Conversion
❑ Edgematching

■ Map Display & Query
■ Change Map Projections
■ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
❑ Buffer generation
❑ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

■ Interactive Display
■ Geometric Rectification
❑ Image Mosaicking
■ Radiometric Corrections
❑ Raster GIS Modeling
■ Hardcopy Map Comp./Anno.
■ Filtering
■ Supervised Classification

■ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Not reported

PRODUCT NAME: Cartographic add-on to Arc/Info

COMPANY/ORGANIZATION

Company Name: GeoSystems Global Corporation
Contact Person(s): Jim Hilliard
Street Address: 53 West James St.
City, State: Lancaster, PA
Zip, Country: 17604, USA
Phone: 717-393-9707
Fax: 717-393-7456
Email: Not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ■ Other: variable
   License fee is: ■ One Time Charge ■ Other Charge: variable
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** variable
5. **Complete (fully capable) software system cost:** variable

USER BASE

6. **Total number of licensed users:** 1
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America: 1
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ❑ Tutorials ■ Other: custom
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: custom
11. **Cost of support:** ❑ Included in License ■ Other: variable
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: variable
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: ESRI Arc/Info supported UNIX platforms.
19. **Minimum hardware** SUN SPARCstation2, 32MB RAM, Arc/Info software.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	As supported by Arc/Info	
■ Frame Grabbers:	As supported by Arc/Info	
■ Scanners:	As supported by Arc/Info	
■ GPS:	As supported by Arc/Info	
■ CD-ROM:	As supported by Arc/Info	
■ Diskette:	As supported by Arc/Info	
■ Tape:	As supported by Arc/Info	
■ Displays:		As supported by Arc/Info
■ Film Recorders:		As supported by Arc/Info
■ Electrostatic Plotters:		As supported by Arc/Info
■ Pen Plotters:		As supported by Arc/Info
■ Ink Jet Printers:		As supported by Arc/Info
■ Laser Printers:		As supported by Arc/Info
❑ Others:		

21. **Source code available:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN ❑ Pascal ■ Other: AML
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ■ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: As supported by Arc/Info
26. **Data Exchange Formats Supported:** As supported by Arc/Info

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
■ Network Flow Analysis
❑ Cell-based (Raster) Modeling
■ Map Composition/Generation
■ Raster-Vector Conversion
■ Edgematching
■ Map Display & Query
■ Change Map Projections
■ Datum Changes
■ Vector Overlay Analysis
■ Surface Modeling
■ Buffer generation
❑ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification
❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Our add-on AML product to Arc/Info provides a set of cartographic tools and techniques for the production of high quality cartographic output.

PRODUCT NAME: COGO/CEAL

COMPANY/ORGANIZATION

Company Name: CLM/Systems, Inc.
Contact Person(s): C.L. Miller
Street Address: 5601 Mariner Drive
City, State: Tampa, FL
Zip, Country: 33609, USA
Phone: 813-286-8755
Fax: 813-286-8993
Email: clmceal@aol.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: Surveying Infrastructure Design

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♦ Yes ◊ No
4. **Basic (minimal) software system cost:** contact source
5. **Complete (fully capable) software system cost:** contact source

USER BASE

6. **Total number of licensed users:** 5000 +
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America: 5000 +
   South America:
8. **Year of first installation:** 1960

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: contact source
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ❑ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ■ Basic ■ Context Sensitive ■ Hypertext ❑ N/A

17. User interface: ■ Command Line ■ Menus ■ User-Customizable Menus
■ User-Generated Macros ■ Other: Graphics

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
■ Windows/NT ❑ MacIntosh ■ PC-OS/2 ■ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: Intel 486, 16 MB RAM, 500 MB Disk

20. Devices supported:

	INPUT	**OUTPUT**
■ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
■ GPS: files		
❑ CD-ROM:		
■ Diskette:		
❑ Tape:		
❑ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		ZEROX
■ Pen Plotters:		HPG
■ Ink Jet Printers:		HP
■ Laser Printers:		HP
❑ Others:		

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ■ INFO ■ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: DXF, DGM

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
■ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

■ Map Display & Query
❑ Change Map Projections
■ Datum Changes
■ Vector Overlay Analysis
■ Surface Modeling
❑ Buffer generation
■ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display
■ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
■ Hardcopy Map Comp./Anno.
■ Filtering
❑ Supervised Classification

❑ Image Enhancement
■ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: contact company

PRODUCT NAME: CRISP

COMPANY/ORGANIZATION

Company Name: ALNA
Contact Person(s): Tomas Milaknis
Street Address: Jaksto 13
City, State: Vilnius
Zip, Country: 2001, Lithuania
Phone: 3702-226-572
Fax: 3702-226-928
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** $900 US dollars
5. **Complete (fully capable) software system cost:** $1450 US dollars

USER BASE

6. **Total number of licensed users:** 56
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 56
   North America:
   South America:
8. **Year of first installation:** 1992

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: 15% per ann
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ■ Russian ❑ Spanish ■ Other: Lithuanian

16. Online help: ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A

17. User interface: ❑ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: 486, RAM 4 MB, VGA

20. Devices supported: All Windows supported

	INPUT	**OUTPUT**
■ Digitizers:	ALTEK, SUMMAGRAPHICS, CALCOMP	
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		
❑ Film Recorders:		
❑ Electrostatic Plotters:		
■ Pen Plotters:		
■ Ink Jet Printers:		
■ Laser Printers:		
■ Others:		

21. Source code available: ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ♢ Yes ◆ No

23. Linkable libraries for data structure access: ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◆ No

24. Integrated Data Base Management System: ◆ Yes ♢ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: DXF, TXT

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
■ Edgematching

■ Map Display & Query
❑ Change Map Projections
❑ Datum Changes
■ Vector Overlay Analysis
❑ Surface Modeling
■ Buffer generation
❑ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: not reported.

PRODUCT NAME: Data-on-the-Map 3.0

COMPANY/ORGANIZATION

Company Name: ChartWrite AB
Contact Person(s): Dr. B. Gyllstroem
Street Address: Ideon
City, State: 223 70 Lund
Zip, Country: Sweden
Phone: 046-46-168930
Fax: 046-46-129879
Email: info@chartwrite.se

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◊ No
4. **Basic (minimal) software system cost:** US $795
5. **Complete (fully capable) software system cost:** US $795

USER BASE

6. **Total number of licensed users:** 100
7. **Number of licensed users by continent:**
   Africa:_____
   Asia:_____
   Australia:_____
   Europe: 100
   North America:_____
   South America:_____
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:_____
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:_____
11. **Cost of support:** ■ Included in License ❑ Other:_____
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:_____
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:_____

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Swedish
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** not reported
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	All Windows 3.x compatible devices	
❑ Frame Grabbers:		
■ Scanners:	All Windows 3.x compatible devices	
■ GPS:	Generic format used by Trimble. Easy to adapt to other ASCII formats.	
❑ CD-ROM:		
❑ Diskette:		
❑ Tape:		
❑ Displays:		
❑ Film Recorders:		
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
■ Ink Jet Printers:		All Windows 3.x compatible devices
■ Laser Printers:		All Windows 3.x compatible devices
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: MS Access
26. **Data Exchange Formats Supported:** DXF (lines)
27. **If GIS Product:** ■ Vector ❑ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ❑ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ❑ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ❑ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ❑ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Raster can be used as layers and as background for digitizing/ updating vector maps. We also provide the run-time version DM-MapServer SDK free of charge. The DM-MapServer is used for designing tailored applications, including real-time GPS or geo-archive applications (searching/updating information about sites, plants, subsidiaries, artifacts, etc.).

PRODUCT NAME: Dimple

COMPANY/ORGANIZATION

Company Name: Cherwell Scientific Publishing, Inc.
Contact Person(s): not reported
Street Address: 744 San Antonio Road, Suite 27A
City, State: Palo Alto, CA
Zip, Country: 94303, USA
Phone: 415-852-0720
Fax: 415-852-0723
Email: not reported

1. **Type of product:**
   ❑ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** $1,795
5. **Complete (fully capable) software system cost:** not reported

USER BASE

6. **Total number of licensed users:** N/A
7. **Number of licensed users by continent:** Africa:_____
   Asia:_____
   Australia:_____
   Europe:_____
   North America:_____
   South America:_____
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ■ Tutorials ❑ Other:_____
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:_____
11. **Cost of support:** ■ Included in License ❑ Other:_____
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:_____
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:_____

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ■ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** MacIntosh, hard drive with 1.44 MB floppy drive, System 6.05 or later, 4 MB RAM.
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ■ Other: IOL
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ❑ Vector ❑ Raster

28. GIS Functionality:

- ❑ Map Digitizing
- ❑ Digital Map Editing
- ❑ Topographical Structuring
- ❑ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ❑ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ❑ Edgematching
- ❑ Map Display & Query
- ❑ Change Map Projections
- ❑ Datum Changes
- ❑ Vector Overlay Analysis
- ❑ Surface Modeling
- ❑ Buffer generation
- ❑ Line-of-Sight Analysis
- ❑ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: DIMPLE is an interactive image processing system for the earth sciences. Complete with a range of images and multispectral analysis tools, including classifications, image registration, and rectification. Ideal for people working with remotely sensed images on the Mac. Now available for the Power Mac which runs up to 10/15 times faster than on 68K Macs. Please call for a free demo.

PRODUCT NAME: DM-MapServer SDK

COMPANY/ORGANIZATION

Company Name: ChartWrite AB
Contact Person(s): Dr. B. Gyllstroem
Street Address: Ideon
City, State: 223 70 Lund
Zip, Country: Sweden
Phone: 046-46-168930
Fax: 046-46-129879
Email: info@chartwrite.se

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: DLL/OEM

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ❑ Other:
   License fee is: ❑ One Time Charge ❑ Other Charge: No license fee
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◊ No
4. **Basic (minimal) software system cost:** nil
5. **Complete (fully capable) software system cost:** nil

USER BASE

6. **Total number of licensed users:** 50
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 50
   North America:
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: If required, based on individual agreements
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ❑ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ❑ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** same as for Data-on-the-Map 3.0, 386, 33Mhz
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◆ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ■ Other: Application examples available in Visual Basic and C++ code.
    ◊ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** Imports map data in *.stf-format (Data-on-the-Map 3.0)

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

❑ Map Digitizing	❑ Map Display & Query
❑ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Raster can be used as map layers (*.stf-format). The user may design applications in any environment which can call our DLL, for example Visual Basic or C++. The DM-MapServer SDK is the run-time version of Data-on-the-Map 3.0.

PRODUCT NAME: **DRAGON/ips** (Academic Edition & Professional Suite)

COMPANY/ORGANIZATION

Company Name: Goldin-Rudahl Systms, Inc.
Contact Person(s): Dr. Sally E. Goldin
Street Address: 6 University Drive #213
City, State: Amherst, MA
Zip, Country: 01059, USA
Phone: 413-253-7340
Fax: 413-549-6401
Email: 3086210@mcimail.com

1. **Type of product:**
   ❑ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ■ Other: Willing to consider special arrangements for non-profit organizations
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $995 Academic Edition / $400 each if eight seats or more
5. **Complete (fully capable) software system cost:** $1795 (Dragon Professional Suite)

USER BASE

6. **Total number of licensed users:** 500 (seats - most installations are at university labs so will have more users than seats)
7. **Number of licensed users by continent:**
   Africa: 25 estimated
   Asia: 200 estimated
   Australia: 50 estimated
   Europe: 150 estimated
   North America: 50 estimated
   South America: 25 estimated
8. **Year of first installation:** 1988

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:

12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: Irregularly, as available

13. **Cost of updates:** ■ Included in License or Maintenance Contract ■ Other: $250 per site, per update
For Professional Suite

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files

15. **Languages available:**

❑ Arabic	❑ Bengali	■ English	❑ French
❑ German	❑ Hindi	❑ Japanese	❑ Mandarin
❑ Portuguese	❑ Russian	■ Spanish	■ Other: Malay, Czech

16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A

17. **User interface:** ■ Command Line ■ Menus ❑ User-Customizable Menus ■ User-Generated Macros ■ Other: Interactive Response Panels

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95 ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP ❑ VAX/VMS ❑ Other: _____

19. **Minimum hardware configuration:** For DOS Version: 286 or better computer, 2 MB RAM, VGA or SVGA display - mouse and math coprocessor recommended.

20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:		
❑ Frame Grabbers:		
■ Scanners:	HP Scanjet Series	
❑ GPS:		
■ CD-ROM:	Any	
■ Diskette:	Any	Same
■ Tape:	Any device with an ASPI SCSI interface	Same
■ Displays:		VGA, SVGA, also TIGA, TARGA, XGA etc.
■ Film Recorders:		(Via TIF, TGA or PCX files)
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
■ Ink Jet Printers:		Most HP inket printers Canon Bubblejet series
■ Laser Printers:		PostScript, also HP Laserjet
■ Others:		Color PostScript support

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other: _____
◆ No

22. **Batch capability:** ◆ Yes ◊ No

23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN

❑ Pascal ❑ Other:_____

◊ No

24. Integrated Data Base Management System: ◊ Yes ◆ No

25. Data Base File Types Supported: ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: many

27. If GIS Product: ❑ Vector ❑ Raster

28. GIS Functionality:

❑ Map Digitizing	❑ Map Display & Query
❑ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	❑ Fourier Analysis
■ Radiometric Corrections	❑ Multivariate/Statistical Analysis
■ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	■ Principal Components Analysis
■ Filtering	■ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Provides full, 24-bit color display. Starting in January '96, all purchasers will receive both MS DOS and Windows versions. Designed for R/S - GIS education. Highly interactive, clearly structured, extensive help, comprehensive documentation. Designed for internationalization. Supports unicode (ISO 10646) standard for representing world-wide character sets.

PRODUCT NAME: Eagle Point GIS Software (FMS)

COMPANY/ORGANIZATION

Company Name: Eagle Point Software
Contact Person(s): John Biver or David Hawkins
Street Address: 4131 Westmark Drive
City, State: Dubuque, IA
Zip, Country: 52002-2627, USA
Phone: 800-678-6565; outside the USA 319-556-8392
Fax: 319-556-5321
Email: strakab@netins.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ❑ Site ■ Other: Situational
   License fee is: ❑ One Time Charge ■ Other Charge: Situational
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** not reported
5. **Complete (fully capable) software system cost:** not reported

USER BASE

6. **Total number of licensed users:** 20,000 +
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1983

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: Situational
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: Situational

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ■ French
■ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ■ Spanish ■ Other: Italian

16. Online help: ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A

17. User interface: ■ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ■ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: 386 with math coprocessor, 16MB RAM, 500 MB hard drive; Recommend 486/66 or higher (pentium), 24 MB RAM

20. Devices supported:

	INPUT	OUTPUT
■ Digitizers:	_____	
■ Frame Grabbers:	_____	
■ Scanners:	_____	
❑ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◆ Yes: ❑ C ■ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◊ No

24. Integrated Data Base Management System: ◊ Yes ◆ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ■ Oracle ■ Paradox ❑ Progress
❑ Sybase ■ Other: Informix, ODBC

26. Data Exchange Formats Supported: not reported

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

❑ Map Digitizing
❑ Digital Map Editing
■ Topographical Structuring
■ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

■ Map Display & Query
■ Change Map Projections
■ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
■ Buffer generation
❑ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: not reported.

PRODUCT NAME: EASI/PACE

COMPANY/ORGANIZATION

Company Name: PCI
Contact Person(s): Mr. Mike Pastushak
Street Address: 50 West Wilmot Street
City, State: Richmond Hill, Ontario
Zip, Country: L4B IMB, Canada
Phone: 905-764-0614
Fax: 905-764-9604
Email: pastushak@pci.on.ca

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ■ Other: Remote Sensing

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $1,000
5. **Complete (fully capable) software system cost:** $50,000

USER BASE

6. **Total number of licensed users:** 2,000
7. **Number of licensed users by continent:**
   Africa: 100
   Asia: 300
   Australia: 100
   Europe: 400
   North America: 900
   South America: 200
8. **Year of first installation:** 1982

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other:
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ■ MacIntosh ■ PC-OS/2 ■ OS/2 WARP
    ■ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: SUN, SGI, HP, DEC, IBM, Data General.
19. **Minimum hardware configuration:** 500 MB disk, 16 MB RAM
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
❑ Frame Grabbers:	_____	
■ Scanners:	_____	
■ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
■ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◆ Yes: ❑ C ■ C++ ■ FORTRAN ❑ Pascal ❑ Other:_____
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ■ C++ ■ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** 45 raster and vector formats

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	❑ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
❑ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	■ Fourier Analysis
■ Radiometric Corrections	■ Multivariate/Statistical Analysis
■ Raster GIS Modeling	■ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	■ Principal Components Analysis
■ Filtering	■ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Neural Network Classification, Satellite and Airborne Orthophoto generation and DEM extraction, real-time 3-D image fly-through.

PRODUCT NAME: EPPL7 GIS

COMPANY/ORGANIZATION

Company Name: Land Management Information Center
Contact Person(s): Ken Pekarek
Street Address: 658 Cedar Street
City, State: St. Paul, MN
Zip, Country: 55155, USA
Phone: 612-296-1201
Fax: 612-296-1212
Email: epp17@lmic.state.mn.us

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ■ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** $500 or less
5. **Complete (fully capable) software system cost:** $500 or less

USER BASE

6. **Total number of licensed users:** 2,387
7. **Number of licensed users by continent:**
   Africa: 1
   Asia: 37
   Australia: 77
   Europe: 35
   North America: 2237
   South America: 0
8. **Year of first installation:** 1975

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ■ Other: on site
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:_____
11. **Cost of support:** ❑ Included in License ■ Other: $75 / year
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: as developed
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: $125 max / copy

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 80286, VGA monitor, 2 MB RAM, 40 MB hard disk
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	most supported	
❑ Frame Grabbers:		
❑ Scanners:		
■ GPS:	reads ASCII files	
■ CD-ROM:	files direct from CD	
■ Diskette:	sold on 3.5 disks only	
❑ Tape:		
■ Displays:		VESA driver compatible
❑ Film Recorders:		
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
■ Ink Jet Printers:		HP Deskjet Series, HP Paintjets, Cannon, Epson
■ Laser Printers:		PCL language compatible
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ■ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** DXF, TIFF, ERDAS, TARGA
27. **If GIS Product:** ❑ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ❑ Topographical Structuring
- ❑ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ❑ Edgematching
- ■ Map Display & Query
- ❑ Change Map Projections
- ❑ Datum Changes
- ❑ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ❑ Geometric Rectification
- ■ Image Mosaicking
- ❑ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ■ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Special discounts for Academic, student, and non-profit groups. Discounted site licenses available also.

PRODUCT NAME: ER Mapper

COMPANY/ORGANIZATION

Company Name: Earth Resource Mapping
Contact Person(s): Andrew Nickerson
Street Address: 4370 La Jolla Village Drive
City, State: San Diego, CA
Zip, Country: 92122-1253, USA
Phone: 619-558-4709
Fax: 619-558-2657
Email: queries@ermusa.com

1. **Type of product:**
   ❑ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** not reported
5. **Complete (fully capable) software system cost:** not reported

USER BASE

6. **Total number of licensed users:** over 300
7. **Number of licensed users by continent:**
   Africa: 5%
   Asia: 25%
   Australia: 10%
   Europe: 25%
   North America: 25%
   South America: 10%
8. **Year of first installation:** 1990

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: separate fee
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: separate fee

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A

17. User interface: ❑ Command Line ■ Menus ■ User-Customizable Menus
❑ User-Generated Macros ■ Other: mainly driven by toolbars

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

If UNIX/X-Windows, list vendors and window managers supported: Sun/Solaris, Sun/OS, IBM RS6000, Silicon Graphics, DEC Alpha/OSF, HP 9000 to name a few.

19. Minimum hardware configuration: PC: 486/33 (Intel compatible), 16 MB RAM, 600 MB free hard disk, 8 bit graphics, CDROM drive, mouse, WindowsNT/95; Sun: Sparc5, GX graphics, Solaris 2.3, 600 MB hard disk space, CDROM drive, mouse; SGI: Indy PC, R4600 processor, 32 MB RAM, IRIX 5.2, 600 MB free disk space, CDROM drive; HP: HP 9000-735, 8 bit display, 32 MB RAM, HP-UX 9.01, 600 MB free disk space, CDROM drive; DEC: Alpha AXP-300, 8 bit display, 32 MB RAM, OSF/1 v1.3, 600 MB free disk space, CDROM drive.

20. Devices supported:

	INPUT	OUTPUT
■	Digitizers: limited only to file format	
❑	Frame Grabbers:	
■	Scanners: limited only to file format	
■	GPS: limited only to file format	
❑	CD-ROM:	
❑	Diskette:	
❑	Tape:	
❑	Displays:	
❑	Film Recorders:	
■	Electrostatic Plotters:	We support over 240 harcopy output devices
❑	Pen Plotters:	
❑	Ink Jet Printers:	
❑	Laser Printers:	
❑	Others:	

21. Source code available: ◆ Yes: ■ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◊ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◊ Yes: ■ C ❑ C++ ❑ FORTRAN

❑ Pascal ❑ Other:_____

◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ■ INFO ■ Intergraph
❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: over 150 file formats supported (tiff, .dxf, ascii etc.)

27. If GIS Product: ❑ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ■ Image Mosaicking
- ■ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ■ Filtering
- ■ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ■ Fourier Analysis
- ■ Multivariate/Statistical Analysis
- ■ Radar Geocoding & Analysis
- ■ Principal Components Analysis
- ■ Density Slicing
- ■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◊ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: ER Mapper is raster based image processing and map composition tool. We realize the need to integrate GIS and image processing and so have added quite a bit of GIS functionality, but by no means are we a GIS. We have strong use in the mineral exploration, oil & gas, and defense communities and are gaining momentum in many other applications as well. The product is a powerful yet easy to use image processing and map composition tool. Earth Resource Mapping prides itself on customer service and satisfaction. We are committed to open standards. The list of import/export formats, hardcopy devices, and functionality is continually updated to help make ER Mapper the easiest, most powerful, and most cost effective solution for the end users map production and image processing needs.

PRODUCT NAME: ERDAS IMAGINE

COMPANY/ORGANIZATION

Company Name: ERDAS, Inc.
Contact Person(s): Stanley E. Quinn
Street Address: 2801 Buford Highway N.E., Ste 300
City, State: Atlanta, GA
Zip, Country: 30329-2137, USA
Phone: 404-248-9000
Fax: 404-248-9400
Email: quinn@erdas.com

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** Contact local distributor
5. **Complete (fully capable) software system cost:** Modular system-depends on full configuration

USER BASE

6. **Total number of licensed users:** 10,000 +
7. **Number of licensed users by continent:**
   Africa: 300
   Asia: 1500
   Australia: 200
   Europe: 2100
   North America: 5400
   South America: 500
8. **Year of first installation:** 1981

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: contact local distributor
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: contact ERDAS
19. **Minimum hardware configuration:** contact ERDAS
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	contact ERDAS	
■ Frame Grabbers:	contact ERDAS	
■ Scanners:	contact ERDAS	
■ GPS:	contact ERDAS	
■ CD-ROM:	contact ERDAS	
■ Diskette:	contact ERDAS	contact ERDAS
■ Tape:	contact ERDAS	contact ERDAS
■ Displays:		contact ERDAS
■ Film Recorders:		contact ERDAS
■ Electrostatic Plotters:		contact ERDAS
■ Pen Plotters:		contact ERDAS
■ Ink Jet Printers:		contact ERDAS
■ Laser Printers:		contact ERDAS
■ Others:		contact ERDAS

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ■ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: ASCII
26. **Data Exchange Formats Supported:** many, contact ERDAS
27. **If GIS Product:** ■ Vector ❑ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ❑ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ■ Image Mosaicking
- ■ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ■ Filtering
- ■ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ■ Fourier Analysis
- ■ Multivariate/Statistical Analysis
- ■ Radar Geocoding & Analysis
- ■ Principal Components Analysis
- ■ Density Slicing
- ■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: contact ERDAS

PRODUCT NAME: Express Document Retrieval System

COMPANY/ORGANIZATION

Company Name: Scanning America, Inc.
Contact Person(s): Tim Hunsinger
Street Address: 1007 ½ Massachusetts St.
City, State: Lawrence, KS
Zip, Country: 66044, USA
Phone: 913-749-7471
Fax: 913-749-7213
Email: info@scanamerica.com

1. **Type of product:**
   ❑ GIS ■ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $995
5. **Complete (fully capable) software system cost:** varies

USER BASE

6. **Total number of licensed users:** N/A
7. **Number of licensed users by continent:** Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: negotiated
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 486 with 8 MB RAM
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
❑ Frame Grabbers:	_____	
■ Scanners:	_____	
❑ GPS:	_____	
■ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
■ Displays:		_____
❑ Film Recorders:		_____
■ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◆ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing	■ Map Display & Query
❑ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Scanning America provides complete scanning and vector conversion services as well as integration of custom document management systems.

PRODUCT NAME: FACET

COMPANY/ORGANIZATION

Company Name: Facet Decision Systems, Inc.
Contact Person(s): Scott Akenhead
Street Address: 187 - 916 West Broadway
City, State: Vancouver, BC
Zip, Country: V5Z IK7,Canada
Phone: 604-739-7703
Fax: 604-739-7753
Email: info@facet.com

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: object-oriented modelling

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $23,500 US dollars
5. **Complete (fully capable) software system cost:** $45,000 (approx.)

USER BASE

6. **Total number of licensed users:** not reported
7. **Number of licensed users by continent:**
   Africa: 0
   Asia: 10%
   Australia: 0
   Europe: 10%
   North America: 80%
   South America:
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: 10% of license, annual
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other: 10% annual

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other: uses spreadsheet metaphor

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: SUN only; Solaris on Intel coming.
19. **Minimum hardware configuration:** Sun Sparc Station 5, 64 MB RAM, 1 GB disk
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
■ CD-ROM:	standard	
■ Diskette:	DOS and SUN	
■ Tape:	all types	
❑ Displays:		
❑ Film Recorders:		
❑ Electrostatic Plotters:		
■ Pen Plotters:		IGDS, HPGL2
■ Ink Jet Printers:		HPGL2
■ Laser Printers:		Postscript and HP LJ series
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ■ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other: everything
26. **Data Exchange Formats Supported:** all common types, anything as required

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	■ Fourier Analysis
■ Radiometric Corrections	■ Multivariate/Statistical Analysis
■ Raster GIS Modeling	■ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	■ Principal Components Analysis
■ Filtering	■ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: Oracle 7 Spatial Data Option. Facet provides highest value use of existing investment in data.

PRODUCT NAME: FlexScreen

COMPANY/ORGANIZATION

Company Name: IntelliGIS, Inc.
Contact Person(s): Diane Garey
Street Address: 12946 Dairy Ashford, Suite 250
City, State: Sugar Land, TX
Zip, Country: 77478, USA
Phone: 713-240-2700
Fax: 713-240-2714
Email: dianeg@igis.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ■ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** Please request quotation
5. **Complete (fully capable) software system cost:** Please request quotation

USER BASE

6. **Total number of licensed users:** 5
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America: 5
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: SUN Microsystems
19. **Minimum hardware configuration:** Please contact vendor
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: Versant
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

- ❑ Map Digitizing
- ❑ Digital Map Editing
- ❑ Topographical Structuring
- ❑ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ❑ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ❑ Edgematching
- ❑ Map Display & Query
- ❑ Change Map Projections
- ❑ Datum Changes
- ❑ Vector Overlay Analysis
- ❑ Surface Modeling
- ❑ Buffer generation
- ❑ Line-of-Sight Analysis
- ❑ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: FlexScreen is a GIS-based ticket screening and management system for central One-Call facilities and field engineers and line spotters. It provides automated and manual ticket screening, route finding, message dispatching and archiving functions.

PRODUCT NAME: FPMS - Flood Plain Management System

COMPANY/ORGANIZATION

Company Name: CartoLogix Corporation
Contact Person(s): Kenneth R. DePodesta, Peter Nimmrichter
Street Address: 3215 North Service Road, P.O. Box 220
City, State: Burlington, Ontario
Zip, Country: L7R 3Y2, Canada
Phone: 905-332-6488
Fax: 905-335-1414
Email: cartolgx@ftn.net

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $10000
5. **Complete (fully capable) software system cost:** $20,000

USER BASE

6. **Total number of licensed users:** 4
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America: 4
   South America:
8. **Year of first installation:** 1990

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: As required
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: Not core technology

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ■ Other: dialogues

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:
19. **Minimum hardware configuration:** 486/Pentium CPU, 16-32 MB RAM, 1 GB disk storage, SVGA display
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	as supported by AutoCAD	
■ Frame Grabbers:	external to application	
■ Scanners:	hardware dependent	
■ GPS:	external to application	
■ CD-ROM:	hardware dependent	
■ Diskette:	hardware dependent	
■ Tape:	hardware dependent	
■ Displays:		as supported by AutoCAD
■ Film Recorders:		hardware dependent
■ Electrostatic Plotters:		as supported by AutoCAD
■ Pen Plotters:		as supported by AutoCAD
■ Ink Jet Printers:		as supported by AutoCAD
■ Laser Printers:		as supported by AutoCAD
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ■ Paradox ❑ Progress
    ■ Sybase ■ Other: Informix, Rbase, ODBC compliant
26. **Data Exchange Formats Supported:** DXF
27. **If GIS Product:** ■ Vector ❑ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: The Water Surface Profile program HEC-2 (from the US Army Corps of Engineers) is integrated with AutoCAD, ADE, Spatialist, Rbase, QuickSURF and CADOverlay for the comprehensive management of flood plain data in a seamless, continuous map environment.

PRODUCT NAME: FRK

COMPANY/ORGANIZATION

Company Name: FORMATEK INC.
Contact Person(s): Pierre-Paul Grondin
Street Address: 1365, rue Galilee, bureau 100
City, State: Quebec
Zip, Country: G1P 4G4, Canada
Phone: 418-681-7344
Fax: 418-681-8779
Email: formatek@riq.qc.ca

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ■ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** 2000$
5. **Complete (fully capable) software system cost:** 2000$

USER BASE

6. **Total number of licensed users:** Over 200
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 20
   North America: 190
   South America: 10
8. **Year of first installation:** not reported

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ■ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: 500$ per annum

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ■ Spanish ❑ Other:
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 386 - 8 MB of RAM
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:		
■ Frame Grabbers:	Bravado 16 from Truevision	
❑ Scanners:		
■ GPS:	Any x, y data via serial port	
■ CD-ROM:		
■ Diskette:		
❑ Tape:		
■ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		Any Windows compatible
❑ Pen Plotters:		
❑ Ink Jet Printers:		
❑ Laser Printers:		
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:
    ◆ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ■ Paradox ❑ Progress
    ❑ Sybase ■ Other: Access
26. **Data Exchange Formats Supported:** DXF, DGN
27. **If GIS Product:** ■ Vector ■ Raster
28. **GIS Functionality:**

■ Map Digitizing
❑ Digital Map Editing
❑ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

■ Map Display & Query
■ Change Map Projections
■ Datum Changes
■ Vector Overlay Analysis
❑ Surface Modeling
❑ Buffer generation
■ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: FRK software lets workstation users display analog maps stored on videodiscs along with digital images, vectors and text data stored on the computer's hard disk.

PRODUCT NAME: GenaMap

COMPANY/ORGANIZATION

Company Name: Genasys II, Inc.
Contact Person(s): not reported
Street Address: 1501 South Lemay Ave.
City, State: Fort Collins, CO
Zip, Country: 80524, USA
Phone: 970-493-0035
Fax: 970-493-0966
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $2,000
5. **Complete (fully capable) software system cost:** $12,000

USER BASE

6. **Total number of licensed users:** 3,800
7. **Number of licensed users by continent:** Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1985

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: % of sale price
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ■ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ■ Japanese ■ Mandarin
    ❑ Portuguese ❑ Russian ■ Spanish ■ Other: Thai, Korean
16. **Online help:** ■ Basic ■ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: HP, SUN, IBM, DEC, Silicon Graphics, SCO, Motif or Open Windows
19. **Minimum hardware configuration:** 16 MB RAM, 500 MB disk, 256 colors
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Calcomp, Altek, GTCO, Numonics, Summa, Hitachi	
❑ Frame Grabbers:		
■ Scanners:	All through TIFF	
■ GPS:	All through ASCII	
■ CD-ROM:	All	
■ Diskette:	3.5"	
■ Tape:	4mm, 8mm	
❑ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		HP, Calcomp, Versatec, Rastergraphics
■ Pen Plotters:		All with HPGL2
■ Ink Jet Printers:		HP
■ Laser Printers:		HP
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph

❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
■ Sybase ■ Other: Informix, Ingres, Interbase, SQL/400

26. Data Exchange Formats Supported: DGN, DXF, DLG, MOSS, many others

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
■ Network Flow Analysis
■ Cell-based (Raster) Modeling
■ Map Composition/Generation
■ Raster-Vector Conversion
■ Edgematching
■ Map Display & Query
■ Change Map Projections
■ Datum Changes
■ Vector Overlay Analysis
■ Surface Modeling
■ Buffer generation
■ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

■ Interactive Display
■ Geometric Rectification
■ Image Mosaicking
❑ Radiometric Corrections
■ Raster GIS Modeling
■ Hardcopy Map Comp./Anno.
■ Filtering
❑ Supervised Classification
■ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Not reported

PRODUCT NAME: GEO AXSES

COMPANY/ORGANIZATION

Company Name: AXSES, Inc.
Contact Person(s): Ian Clayton
Street Address: Boutiliers Point
City, State: Nova Scotia
Zip, Country: BoJ 1G0, Canada
Phone: 902-826-2440
Fax: 902-826-7274
Email: iclayton@fox.nstn.ca

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge: $499 - 1999
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $499 GIS
5. **Complete (fully capable) software system cost:** $1999

USER BASE

6. **Total number of licensed users:** 60
7. **Number of licensed users by continent:**
   Africa: 0
   Asia: 5
   Australia: 0
   Europe: 5
   North America: 50
   South America: 2
8. **Year of first installation:** 1992

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: $199
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: $199

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** DC 640K
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Calcomp, HP	
■ Frame Grabbers:	Windows, Pizzaz	
■ Scanners:	many - TIFF, BMP, PLX	
■ GPS:	many	
■ CD-ROM:	many	
■ Diskette:	all	
■ Tape:	many	
■ Displays:		VGA/SVGA
■ Film Recorders:		AVI, TPEG
❑ Electrostatic Plotters:		
■ Pen Plotters:		HP
■ Ink Jet Printers:		HP
■ Laser Printers:		HP
❑ Others:		

21. **Source code available:** ◆ Yes: ■ C ■ C++ ■ FORTRAN ❑ Pascal ■ Other: VBASIC, FOXPRO
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ■ Vector ❑ Raster
28. **GIS Functionality:**

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
■ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
■ Edgematching

■ Map Display & Query
■ Change Map Projections
■ Datum Changes
■ Vector Overlay Analysis
❑ Surface Modeling
■ Buffer generation
■ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
■ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: not reported

PRODUCT NAME: GeoCity

COMPANY/ORGANIZATION

Company Name: CLEMESSY S.A.
Contact Person(s): Otmar Galicien, Marcel Degliame
Street Address: 18 rue de Thann
City, State: 68057 Mulhouse
Zip, Country: France
Phone: 33-89-32-31-36
Fax: 33-89-32-32-07
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** 100 000 - 150 000 FRF (1 user)
5. **Complete (fully capable) software system cost:** 200 000 - 250 000 FRF (1 user)

USER BASE

6. **Total number of licensed users:** 140
7. **Number of licensed users by continent:**
   Africa: 2
   Asia:
   Australia: 13
   Europe: 125
   North America:
   South America:
8. **Year of first installation:** 1989

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ❑ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: Maintenance contract
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ❑ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ■ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Easily multilingual
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ■ Other: User Friendly Windows

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Motif
19. **Minimum hardware configuration:** Sun SPARC 5, 64 MB RAM, 1 GB disc
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	OceGraphics, Calcomp, Summegraphics	
❑ Frame Grabbers:		
■ Scanners:	Agfa, HP...	
❑ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:	DAT, EXABYTE...	
■ Displays:		Sun, Xterminal (1024 x 748 mini)
❑ Film Recorders:		
■ Electrostatic Plotters:		PI 636, Calcomp
■ Pen Plotters:		Oce, Calcomp (HPGL)
■ Ink Jet Printers:		XL 300, NovaJet, HP650C (Postscript, HPGL)
■ Laser Printers:		HP, Apple, (Postscript)
❑ Others:		

21. **Source code available:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph

❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
■ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: ASCII, ARC/Info, MOSS, DXF, Michelin, APIC

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
■ Network Flow Analysis
❑ Cell-based (Raster) Modeling
■ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching
■ Map Display & Query
■ Change Map Projections
■ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
■ Buffer generation
❑ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display
❑ Geometric Rectification
■ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
■ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification
❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: not reported

PRODUCT NAME: GEOKEY

COMPANY/ORGANIZATION

Company Name: GEODAN
Contact Person(s): Madeleine Verspuy, Heidi van der Vloet
Street Address: Jan Luijkenstraat 10
City, State: 1071 CM Amsterdam
Zip, Country: The Netherlands
Phone: 020-6757705
Fax: 020-6762794
Email: madelein@geodan.nl or heidi@geodan.nl

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: (Geographical) Meta-Information Management System

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** DFl 30.000
5. **Complete (fully capable) software system cost:** Dfl 30.000

USER BASE

6. **Total number of licensed users:** 10 (big governmental associations)
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 10
   North America:
   South America:
8. **Year of first installation:** 1994

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: Netherlands, Poland...
11. **Cost of support:** ❑ Included in License ■ Other: DFl 5.000 p/year
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Dutch
Polish

16. Online help: ■ Basic ■ Context Sensitive ■ Hypertext ❑ N/A

17. User interface: ❑ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ■ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

If UNIX/X-Windows, list vendors and window managers supported: Not reported

19. Minimum hardware configuration: PC 80486 with 8 MB free space

20. Devices supported:

	INPUT	**OUTPUT**
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
■ Scanners:	able to read all kinds of scanned pictures	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◊ Yes ◆ No

23. Linkable libraries for data structure access: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◆ No

24. Integrated Data Base Management System: ◊ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph

❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: Ingres, Access 1.1, Access 2.0,

26. Data Exchange Formats Supported: the database with the meta data can be written as a Ingres or Oracle script.

27. If GIS Product: ❑ Vector ❑ Raster

28. GIS Functionality:

❑ Map Digitizing	❑ Map Display & Query
❑ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: GEOKEY is a meta information system, in which all kinds of information about information can be stored and viewed (GEOKEY select) and edited (GEOKEY edit). Every organization using GEOKEY can customize it to its own wishes and data structures. GEOKEY is the ideal tool for managing meta info and make info available to every user in an organization. Users of GEOKEY select can apply a number of selection methods on the available meta info, to quickly find the info they are looking for. Once the info is found, there are possibilities to start the GIS the data was generated in, from GEOKEY select, using the found information. GEOKEY is not built solely for one kind of geographical information, but can be used to store info on all kinds of GIS information and even non-GIS information. It's possible to adapt the meta data structure to any standards you wish to use.

PRODUCT NAME: GeoLink Mapping System

COMPANY/ORGANIZATION

Company Name: GeoResearch, Inc.
Contact Person(s): Darrel E. Peterson
Street Address: 115 North Broadway
City, State: Billings, MT
Zip, Country: 59101, USA
Phone: 406-248-6771
Fax: 406-248-6770
Email: geolink@gri.com

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: GPS/GIS

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $2,495
5. **Complete (fully capable) software system cost:** $7,500

USER BASE

6. **Total number of licensed users:** 1000 +
7. **Number of licensed users by continent:**
   Africa: 6%
   Asia: 15%
   Australia: 4%
   Europe: 10%
   North America: 50%
   South America: 15%
8. **Year of first installation:** 1989

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: Annual program
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 486 for laptop or notebook computer
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
■ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ❑ Vector ❑ Raster
28. **GIS Functionality:**

❑ Map Digitizing
❑ Digital Map Editing
❑ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

❑ Map Display & Query
■ Change Map Projections
■ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
❑ Buffer generation
❑ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◊ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: not reported

PRODUCT NAME: GEOMAX Software

COMPANY/ORGANIZATION

Company Name: GEOMAX International, Inc.
Contact Person(s): Jean-Guy Laplante
Street Address: 80, Jean-Proulx
City, State: Hull, Quebec
Zip, Country: J8Z 1W1, Canada
Phone: 819-770-9631
Fax: 819-770-9267
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ■ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ❑ Other:
   License fee is: ❑ One Time Charge ■ Other Charge: Maintenance
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $2,500 per user
5. **Complete (fully capable) software system cost:** $15,000 / user

USER BASE

6. **Total number of licensed users:** +600
7. **Number of licensed users by continent:**
   Africa: 10
   Asia: 5
   Australia: 75
   Europe: 160
   North America: 350
   South America: 0
8. **Year of first installation:** 1984

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: 12% to 18% of the license value
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ■ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:

16. Online help: ❑ Basic ■ Context Sensitive ■ Hypertext ❑ N/A

17. User interface: ■ Command Line ■ Menus ■ User-Customizable Menus
■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

If UNIX/X-Windows, list vendors and window managers supported: IBM - SUN and all PCs with "Linux".

19. Minimum hardware configuration: 16 MEG of RAM, 500 MEG of disc, high resolution graphic capabilities

20. Devices supported:

	INPUT	OUTPUT
■ Digitizers:	most	
❑ Frame Grabbers:		
■ Scanners:	standard interfaces	
❑ GPS:		
■ CD-ROM:	standard interfaces	
■ Diskette:	standard interfaces	
■ Tape:	standard interfaces	
■ Displays:		standard interfaces
❑ Film Recorders:		
■ Electrostatic Plotters:		standard interfaces
■ Pen Plotters:		most standard interfaces
■ Ink Jet Printers:		most standard interfaces
■ Laser Printers:		most standard interfaces
❑ Others:		

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◆ Yes: ■ C ■ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph

❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
■ Sybase ■ Other: Informix and Netbase

26. Data Exchange Formats Supported: not reported

27. If GIS Product: ❑ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
■ Geometric Rectification	❑ Spatial Filtering
■ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
■ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: not reported

PRODUCT NAME: GeoPilot

COMPANY/ORGANIZATION

Company Name: IntelliGIS, Inc.
Contact Person(s): Diane Garey
Street Address: 12946 Dairy Ashford, Suite 250
City, State: Sugar Land, TX
Zip, Country: 77478, USA
Phone: 713-240-2700
Fax: 713-240-2714
Email: dianeg@igis.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** Please request quotation
5. **Complete (fully capable) software system cost:** Please request quotation

USER BASE

6. **Total number of licensed users:** 30
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America: 30
   South America:
8. **Year of first installation:** 1994

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: SUN Microsystems
19. **Minimum hardware configuration:** Sparcstation, 16 MB RAM, hard disk, tape drive
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
❑ CD-ROM:		
❑ Diskette:		
❑ Tape:		
❑ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		PostScript, CGM formats
■ Pen Plotters:		PostScript, CGM formats
■ Ink Jet Printers:		PostScript, CGM formats
■ Laser Printers:		PostScript, CGM formats
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ■ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** Zycor
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing	■ Map Display & Query
❑ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: GeoPilot is a petroleum data browser for the enterprise wide desktop. It enhances the company's information management strategy by allowing users throughout the organization to spatially retrieve, visualize, query, interpret and model data.

PRODUCT NAME: Geo/SQL R4.2

COMPANY/ORGANIZATION

Company Name: Geo/SQL Corporation
Contact Person(s): Jim Franklin or Ally Bailey
Street Address: 9035 Wadsworth Pkwy, Suite 3300
City, State: Broomfield, CO
Zip, Country: 80021-4541, USA
Phone: 303-940-9266
Fax: 303-940-9576
Email: sales@g5.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** $1500
5. **Complete (fully capable) software system cost:** $9500

USER BASE

6. **Total number of licensed users:** 900
7. **Number of licensed users by continent:**
   Africa: 0
   Asia: 10
   Australia: 5
   Europe: 70
   North America: 800
   South America: 15
8. **Year of first installation:** 1987

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: ≤ 15% (varies with software purchased
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other: Generally
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ■ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: SunOS/Solaris (open windows)
19. **Minimum hardware configuration:** 386, 20+ MHz, ACAD - Support peripheral devices, 12 MB RAM.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	ACAD - supported	
❑ Frame Grabbers:	3rd party	
❑ Scanners:	NA	
❑ GPS:	NA	
❑ CD-ROM:	NA	
❑ Diskette:	NA	
❑ Tape:	NA	
❑ Displays:		NA
❑ Film Recorders:		NA
❑ Electrostatic Plotters:		ACAD supported
❑ Pen Plotters:		ACAD supported
❑ Ink Jet Printers:		ACAD supported
❑ Laser Printers:		ACAD supported
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ■ IMS ■ INFO ❑ Intergraph
    ■ Lotus ■ Oracle ■ Paradox ■ Progress
    ■ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** DWG, DXF, GXP, ARC/Info Generate

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	■ Surface Modeling
❑ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Geo/SQL is a sophisticated, open and easy-to-use GIS/mapping system that combines a seamless, multi-user spatial database with the power of SQL and the ease-of-use of AutoCAD. It can be used standalone and in conjunction with other industry standard software to provide complete GIS functionality, including data collection, data management, coordinate geometry, cartographic transformation, spatial overlay, statistical analysis, network analysis, raster to vector integration, reporting, etc.

PRODUCT NAME: GIS base

COMPANY/ORGANIZATION

Company Name: Tekla Oy
Contact Person(s): Risto Sajaniemi
Street Address: Koronakatu 1
City, State: 02210 Espoo
Zip, Country: Finland
Phone: 358-0-8879500
Fax: 358-0-8039489
Email: rs@tekla.fi

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: 4th GL for GIS

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** depends on HW and application area
5. **Complete (fully capable) software system cost:** depends on HW and no. of users

USER BASE

6. **Total number of licensed users:** >1000
7. **Number of licensed users by continent:**
   Africa: <50
   Asia: <100
   Australia:
   Europe: >1000
   North America: >100%
   South America:
8. **Year of first installation:** 1989

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: Europe
11. **Cost of support:** ❑ Included in License ■ Other: requires maintenance agreement
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: as agreed
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ■ Other: Motif or Windows GUI

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ■ VAX/VMS ❑ Other:
    If UNIX/X-Windows, list vendors and window managers supported: DEC, HP, IBM, SUN / MWM
19. **Minimum hardware configuration:** depends on application
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	several	
❑ Frame Grabbers:		
■ Scanners:	several	
■ GPS:	several	
■ CD-ROM:		
■ Diskette:	all supported by hw	
■ Tape:	all supported by hw	
■ Displays:		all supported by hw
❑ Film Recorders:		
■ Electrostatic Plotters:		several
■ Pen Plotters:		several
■ Ink Jet Printers:		several
■ Laser Printers:		several
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ■ Sybase ■ Other: any full function RDBMS
26. **Data Exchange Formats Supported:** DXF, DGN, TIFF, etc.
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ❑ Surface Modeling
- ❑ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: GISbase is a registered trademark of Tekla Oy. GISbase is a complete tool set for implementing GIS applications.

PRODUCT NAME: GisPlus

COMPANY/ORGANIZATION

Company Name: Caliper Corporation
Contact Person(s): Graham Barrowman
Street Address: 1172 Beacon Street
City, State: Newton, MA
Zip, Country: 02161, USA
Phone: 617-527-4700
Fax: 617-527-5113
Email: graham@caliper.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $2995
5. **Complete (fully capable) software system cost:** $2995

USER BASE

6. **Total number of licensed users:** N/A
7. **Number of licensed users by continent:**
   Africa: N/A
   Asia: N/A
   Australia: N/A
   Europe: N/A
   North America: N/A
   South America: N/A
8. **Year of first installation:** 1989

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:_____
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:_____
11. **Cost of support:** ❑ Included in License ■ Other: annual maintenance fee
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:_____
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:____

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ❑ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A

17. User interface: ❑ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ■ Other: toolbar/toolbox

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: 80486, 8 MB RAM, CD-ROM drive

20. Devices supported:

	INPUT	**OUTPUT**
■ Digitizers:	Wintab compliant	
❑ Frame Grabbers:		
■ Scanners:	Windows compliant	
■ GPS:	Trimble mobile GPS	
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		high resolution
❑ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		any Windows compliant output device
■ Ink Jet Printers:		
■ Laser Printers:		
❑ Others:		

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◆ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
■ Lotus ■ Oracle ■ Paradox ❑ Progress
■ Sybase ■ Other: any ODBC compliant DBMS

26. Data Exchange Formats Supported: ARC/INFO, MAP/INFO, ATLAS, DXF, OS NTF

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
■ Network Flow Analysis
❑ Cell-based (Raster) Modeling
■ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

■ Map Display & Query
■ Change Map Projections
■ Datum Changes
■ Vector Overlay Analysis
■ Surface Modeling
■ Buffer generation
■ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
■ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
■ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: GIS development kit - supports the creation of map server applications, macro programs and custom user interfaces. Support for OLE 2.0 and open database connectivity (ODBC).

PRODUCT NAME: GOTHIC ADE

COMPANY/ORGANIZATION

Company Name: Laser-Scan Ltd.
Contact Person(s): Nick George
Street Address: Cambridge Science Park, Milton Road
City, State: Cambridge
Zip, Country: CB4 4FY, UK
Phone: 44-01223-420414
Fax: 44-01223-420044
Email: nickge@lsl.co.uk

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ■ Other: runtime licenses when sold on
   License fee is: ■ One Time Charge ■ Other Charge: royalties
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** POA
5. **Complete (fully capable) software system cost:** POA

USER BASE

6. **Total number of licensed users:** not reported
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** not reported

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ■ Other: consultancy/training
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ■ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: as available
13. **Cost of updates:** ■ Included in License or Maintenance Contract ■ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Hangul - (Korean) ; suitable for localising

16. Online help: ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A

17. User interface: ❑ Command Line ❑ Menus ■ User-Customizable Menus
■ User-Generated Macros ■ Other: user development

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:

If UNIX/X-Windows, list vendors and window managers supported: Motif on HP, DEC, IBM and SUN

19. Minimum hardware configuration: 32 MB and 100 MB swap space. Recommend 64 MB and 200 MB swap space.

20. Devices supported:

	INPUT	OUTPUT
■ Digitizers:	ALTEK AC40, Calcomp 9100, plus others by user customization or developed to order.	
❑ Frame Grabbers:		
■ Scanners:	as supported by the platform	
■ GPS:	as supported by the platform but requires user customization to integrate	
■ CD-ROM:	as supported by the platform	
■ Diskette:	as supported by the platform	
■ Tape:	as supported by the platform	
■ Displays:		up to 24 bit color
❑ Film Recorders:		
■ Electrostatic Plotters:		many - as supported by the platform
■ Pen Plotters:		many - as supported by the platform
■ Ink Jet Printers:		as supported by the platform
■ Laser Printers:		as supported by the platform
❑ Others:		

21. Source code available: ◆ Yes: ■ C ■ C++ ❑ FORTRAN ❑ Pascal ❑ Other:
◊ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◆ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ■ Other: through toolkit use
◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other: INGRES

26. Data Exchange Formats Supported: Lots

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
■ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: GOTHIC ADE is a GIS development environment. Any of the supported features could be developed by VARS and existing features could be enhanced by VARS.

PRODUCT NAME: GRADIS - GIS

COMPANY/ORGANIZATION

Company Name: Strassle Informations Systeme AG
Contact Person(s): Dr. Peter Ladstatter
Street Address: Kanalstrasse 33
City, State: 8152 Glattbrugg
Zip, Country: Switzerland
Phone: 41-1-828-81-11
Fax: 41-1-828-82-12
Email: lad@sti.ch

1. **Type of product:**
   ■ GIS ❑ Image Processing ■ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge: 30.000 US$
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** 30.000 US$
5. **Complete (fully capable) software system cost:** 44.000 US$

USER BASE

6. **Total number of licensed users:** 120
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 120
   North America:
   South America:
8. **Year of first installation:** 1991

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: Europe
11. **Cost of support:** ❑ Included in License ■ Other: maintenance contract
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: as available
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ■ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ■ Russian ❑ Spanish ■ Other: Finnish
16. **Online help:** ■ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ❑ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: HP, IBM, Motif
19. **Minimum hardware configuration:** 64 MB memory, 1 GB disk
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Aristo	
❑ Frame Grabbers:		
■ Scanners:		
❑ GPS:		
❑ CD-ROM:		
■ Diskette:		
■ Tape:		
❑ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		
■ Ink Jet Printers:		
■ Laser Printers:		
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** on demand
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ❑ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ❑ Datum Changes
- ■ Vector Overlay Analysis
- ❑ Surface Modeling
- ■ Buffer generation
- ❑ Line-of-Sight Analysis
- ❑ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ■ Image Mosaicking
- ■ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ■ Filtering
- ❑ Supervised Classification
- ■ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Fully integrated relational DBMS interactive raster/vector conversion, on-screen digitizing, seamless geographic database, extended data dictionary for spatial modelling.

PRODUCT NAME: GRASS (Geographic Resources Analysis Support System)

COMPANY/ORGANIZATION

Company Name: (1) CERL: Construction Engineering Research Laboratories); or
(2) Rutgers: Remote Sensing Center
Contact Person(s): (1) None
(2) Dr. Scott Madry
Street Address: (1) P.O. Box 4005
(2) Cook College, Dept. Environmental Resources
City, State: (1) Champaign, IL
(2) New Brunswick, NJ
Zip, Country: (1) 61826-9005, USA
(2) 08903, USA
Phone: (2) 908-932-9631
Fax: (2) 908-932-8644
Email: not reported

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   - ◆ **Public Domain:**
     Costs for Distribution/Documentation: available FTP: moon.cecer.army.mil
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◊ No
4. **Basic (minimal) software system cost:** none
5. **Complete (fully capable) software system cost:** none

USER BASE

6. **Total number of licensed users:** 3000
7. **Number of licensed users by continent:**
   Africa: 10
   Asia: 20
   Australia: 50
   Europe: 400
   North America: 2500
   South America: 20
8. **Year of first installation:** 1990

SUPPORT/UPDATES

9. **Training available:** ■ Courses ■ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other: None

12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:_____
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: None

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other: LINUX for PCs
    If UNIX/X-Windows, list vendors and window managers supported: Open WIN, Motif, X-Windows
19. **Minimum hardware configuration:** UNIX workstation or PC box running LINUX or Windows-NT on a PC box.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Several	
■ Frame Grabbers:	GRASS and UNIX XV	
■ Scanners:	GRASS	
■ GPS:	Trimble	
■ CD-ROM:	Yes	
■ Diskette:	Yes	
■ Tape:	Yes	
■ Displays:		All UNIX X-Windows
❑ Film Recorders:		
■ Electrostatic Plotters:		Versatec, HP, all PostScript
■ Pen Plotters:		Calcomp, others
■ Ink Jet Printers:		PostScript
■ Laser Printers:		PostScript
❑ Others:		

21. **Source code available:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No not yet, GRASS 5.0 - yes
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress

❑ Sybase ■ Other: all SQL and specifically Informix

26. Data Exchange Formats Supported: ARC, ASCII, DXF, USGS, DLG, SPEGETTI

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	❑ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	■ Fourier Analysis
❑ Radiometric Corrections	■ Multivariate/Statistical Analysis
■ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	■ Principal Components Analysis
■ Filtering	■ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Integrated GIS/Image Processing, public domain. NOTE: Releases have been done through CERL and FTP site. Information is done through Rutgers University.
GRASS INFO HTML: http://www.cecer.army.mil/GRASS.main.html
GLOBAL DATA HTML: http://www.cecer.army.mil/WWWDEMO/global-apps/global

PRODUCT NAME: GRASS (Geographic Resources Analysis Support System)

COMPANY/ORGANIZATION

Company Name: (1) CERL: Construction Engineering Research Laboratories); or
(2) Rutgers: Remote Sensing Center
Contact Person(s): (1) None
(2) Dr. Scott Madry
Street Address: (1) P.O. Box 4005
(2) Cook College, Dept. Environmental Resources
City, State: (1) Champaign, IL
(2) New Brunswick, NJ
Zip, Country: (1) 61826-9005, USA
(2) 08903, USA
Phone: (2) 908-932-9631
Fax: (2) 908-932-8644
Email: not reported

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Public Domain:**
   Costs for Distribution/Documentation: available FTP: moon.cecer.army.mil
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◊ No
4. **Basic (minimal) software system cost:** none
5. **Complete (fully capable) software system cost:** none

USER BASE

6. **Total number of licensed users:** 3000
7. **Number of licensed users by continent:**
   Africa: 10
   Asia: 20
   Australia: 50
   Europe: 400
   North America: 2500
   South America: 20
8. **Year of first installation:** 1990

SUPPORT/UPDATES

9. **Training available:** ■ Courses ■ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other: None

12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:_____
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: None

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other: LINUX for PCs
    If UNIX/X-Windows, list vendors and window managers supported: Open WIN, Motif, X-Windows
19. **Minimum hardware configuration:** UNIX workstation or PC box running LINUX or Windows-NT on a PC box.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Several	
■ Frame Grabbers:	GRASS and UNIX XV	
■ Scanners:	GRASS	
■ GPS:	Trimble	
■ CD-ROM:	Yes	
■ Diskette:	Yes	
■ Tape:	Yes	
■ Displays:		All UNIX X-Windows
❑ Film Recorders:		
■ Electrostatic Plotters:		Versatec, HP, all PostScript
■ Pen Plotters:		Calcomp, others
■ Ink Jet Printers:		PostScript
■ Laser Printers:		PostScript
❑ Others:		

21. **Source code available:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No not yet, GRASS 5.0 - yes
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress

❑ Sybase ■ Other: all SQL and specifically Informix

26. Data Exchange Formats Supported: ARC, ASCII, DXF, USGS, DLG, SPEGETTI

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	❑ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	■ Fourier Analysis
❑ Radiometric Corrections	■ Multivariate/Statistical Analysis
■ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	■ Principal Components Analysis
■ Filtering	■ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Integrated GIS/Image Processing, public domain. NOTE: Releases have been done through CERL and FTP site. Information is done through Rutgers University.
GRASS INFO HTML: http://www.cecer.army.mil/GRASS.main.html
GLOBAL DATA HTML: http://www.cecer.army.mil/WWWDEMO/global-apps/global

PRODUCT NAME: GWN - GIS

COMPANY/ORGANIZATION

Company Name: Scientific Software Group
Contact Person(s): Susan Hardy
Street Address: 11118 Sweetwood Lane
City, State: Oakton, VA
Zip, Country: 22124, USA
Phone: 703-620-9214
Fax: 703-620-6793
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $4,000
5. **Complete (fully capable) software system cost:** $4,000

USER BASE

6. **Total number of licensed users:** 500
7. **Number of licensed users by continent:**
   Africa:_____
   Asia:_____
   Australia:_____
   Europe:_____
   North America:_____
   South America:_____
8. **Year of first installation:** 1992

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:_____
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:_____
11. **Cost of support:** ■ Included in License ❑ Other: After 90 days - Maintenance contract available - Approx. $300 per year
12. **Software updates:** ■ Annually ■ Semiannually ❑ Other:_____

13. Cost of updates: ■ Included in License or Maintenance Contract ❑ Other:_____

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ■ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A

17. User interface: ❑ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ■ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

If UNIX/X-Windows, list vendors and window managers supported: Sun, Apollo, and Intergraph Workstations.

19. Minimum hardware 386 with 8 MB RAM

20. Devices supported:

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
■ Scanners:	_____	
❑ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ■ Intergraph
❑ Lotus ■ Oracle ❑ Paradox ❑ Progress

❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: not reported

27. If GIS Product: ❑ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ■ Image Mosaicking
- ■ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ■ Filtering
- ■ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ■ Fourier Analysis
- ■ Multivariate/Statistical Analysis
- ■ Radar Geocoding & Analysis
- ■ Principal Components Analysis
- ■ Density Slicing
- ■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: none reported

PRODUCT NAME: HDMS - Hydrogeological Data Management System

COMPANY/ORGANIZATION

Company Name: CartoLogix Corporation
Contact Person(s): Kenneth R. DePodesta, Peter Nimmrichter
Street Address: 10 Kingsbridge Garden Circle, Suite 702
City, State: Mississauga, Ontario
Zip, Country: L5R 3K6, Canada
Phone: 905-568-8621
Fax: 905-568-8623
Email: cartolgx@ftn.net

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $15000
5. **Complete (fully capable) software system cost:** $25000

USER BASE

6. **Total number of licensed users:** 1
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America: 1
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: As required
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: Not core technology

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ■ Other: dialogues

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 486/Pentium CPU, 16-32 MB RAM, 1 GB disk storage, SVGA display
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	as supported by AutoCAD	
■ Frame Grabbers:	external to application	
■ Scanners:	hardware dependent	
■ GPS:	external to application	
■ CD-ROM:	hardware dependent	
■ Diskette:	hardware dependent	
■ Tape:	hardware dependent	
■ Displays:		as supported by AutoCAD
■ Film Recorders:		hardware dependent
■ Electrostatic Plotters:		as supported by AutoCAD
■ Pen Plotters:		as supported by AutoCAD
■ Ink Jet Printers:		as supported by AutoCAD
■ Laser Printers:		as supported by AutoCAD
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ■ Paradox ❑ Progress
    ■ Sybase ■ Other: Informix, RBase, ODBC compliant
26. **Data Exchange Formats Supported:** DXF
27. **If GIS Product:** ■ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: AutoCAD, ADE, Spatialist, ORACLE, and QuickSURF are integrated for the management of hydrogeological graphical/tabular data in a seamless map environment. Data draw/access capabilities for spatial/attribute query, analysis and linkage to external programs such as GMS.

PRODUCT NAME: IDRISI

COMPANY/ORGANIZATION

Company Name: The Clark Labs - IDRISI Project
Contact Person(s): Michele Fulk
Street Address: Clark University - 950 Main St.
City, State: Worcester, MA
Zip, Country: 01610-1477, USA
Phone: 508-793-7526
Fax: 508-793-8842
Email: idrisi@vax.clarku.edu

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** $990 commercial, $495 gov't/acad/nonprofit
5. **Complete (fully capable) software system cost:** $990, $495

USER BASE

6. **Total number of licensed users:** 15000
7. **Number of licensed users by continent:**
   Africa: 500
   Asia: 1000
   Australia: 2000
   Europe: 3500
   North America: 7500
   South America: 500
8. **Year of first installation:** 1987

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other: Workbooks
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: $75 per year
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: at material cost

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ■ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 8 bit graphics, 4 MB RAM, 386 processor with math coprocessor support (DX series chip).
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Kurta: IS/ONE, XLC; Altek: AC31LiteLine Calcomp: Drawing Board II, III, Estimat; Summagraphics: Summagrid IV, Summasketch III; GTCO: T5-4 format; Numonics: GridMaster Flexible, Graphic Master II	
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
❑ CD-ROM:		
❑ Diskette:		
❑ Tape:		
❑ Displays:		
❑ Film Recorders:		
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
■ Ink Jet Printers:		Any supported by Windows
■ Laser Printers:		Any supported by Windows
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: Access (Microsoft)

26. Data Exchange Formats Supported: DLG, DXF, many software-specific formats

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	❑ Fourier Analysis
■ Radiometric Corrections	■ Multivariate/Statistical Analysis
■ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	■ Principal Components Analysis
■ Filtering	■ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Tools for Spatial Decision Support, Time Series Analysis and Uncertainty Analysis. Sold on a non-profit basis.

PRODUCT NAME: IGIS

COMPANY/ORGANIZATION

Company Name: Laser-Scan Ltd.
Contact Person(s): Phil Murfitt
Street Address: Cambridge Science Park, Milton Road
City, State: Cambridge
Zip, Country: CB4 4FY, UK
Phone: 44-01223-420414
Fax: 44-01223-420044
Email: not reported

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ❑ Site ❑ Other: concurrent user
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** subject to requirements
5. **Complete (fully capable) software system cost:** subject to requirements

USER BASE

6. **Total number of licensed users:** 7
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 5
   North America: 2
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: subject to size of installation
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other: as available
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ■ Other:_____
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ■ Other: external 'C' code

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Sun, DEC Alpha, and OSF/Motif
19. **Minimum hardware configuration:** 64 MB, 200 MB disc
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	ALTEK, Calcomp	
❑ Frame Grabbers:		
■ Scanners:	REF format	
■ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:		
❑ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		PostScript devices
■ Pen Plotters:		PostScript devices
■ Ink Jet Printers:		PostScript devices
■ Laser Printers:		PostScript devices
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: INGRES
26. **Data Exchange Formats Supported:** NTF, ISIF, DXF, ARC/Export, DFAD, DTED, SPOT, Landsat,

ERDAS, I²s, TIFF, DLG

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ❑ Geometric Rectification
- ■ Image Mosaicking
- ❑ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ■ Filtering
- ■ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ❑ Fourier Analysis
- ■ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: IGIS is a powerful fully integrated raster and vector processing geographical information system which also combines the most frequently used image processing functionality. IGIS is an effective management tool combining the benefits offered by remote sensing or raster based systems, with the analytical capabilities of a GIS, within a single system.

PRODUCT NAME: ILWIS, the Integrated Land and Water Information System

COMPANY/ORGANIZATION

Company Name: ITC - ILWIS Department
Contact Person(s): Mr. J.E.C. Melis
Street Address: 350 Boulevard 1945
City, State: Enschede
Zip, Country: 7500 AA, The Netherlands
Phone: 31-053-487-43-37
Fax: 31-053-487-44-84
Email: ilwis@itc.nl

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** Dfl. 7500, -
5. **Complete (fully capable) software system cost:** Dfl. 7500, -

USER BASE

6. **Total number of licensed users:** 2100
7. **Number of licensed users by continent:**
   Africa: 222
   Asia: 451
   Australia:
   Europe: 472
   North America:
   South America: 955
8. **Year of first installation:** 1988

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: free
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: Dfl. 1250, -

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 286, Mathematical Coprocessor, one graphic screen, one monochrome screen
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	ASCII, Stream Mode, RS232C protocol	
❑ Frame Grabbers:		
■ Scanners:	any supporting TIFF	
❑ GPS:		
■ CD-ROM:	as DOS drive	
■ Diskette:	as DOS drive	
■ Tape:	as DOS drive	
■ Displays:		SVGA
❑ Film Recorders:		
❑ Electrostatic Plotters:		
■ Pen Plotters:		HPGL, HPGL\2
■ Ink Jet Printers:		Deskjet 500 - series, HP Paintjet XL 300
■ Laser Printers:		Laser-Jet, PostScript
❑ Others:		PostScript Level 2, Epson compatible

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ■ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: ASCII Delimited
26. **Data Exchange Formats Supported:** Vector, Raster

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	❑ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	■ Fourier Analysis
❑ Radiometric Corrections	■ Multivariate/Statistical Analysis
■ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	■ Principal Components Analysis
■ Filtering	■ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: GIS and IP combined in one package, Raster-Vector Conversion, Monoplotting Facility

PRODUCT NAME: INFOPORT

COMPANY/ORGANIZATION

Company Name: Gardline Infotech
Contact Person(s): David Pettit
Street Address: Burlingham House, Hewett Road, Gapton Hall
City, State: Great Yarmouth, Norfolk
Zip, Country: NR31 0NN, UK
Phone: 01493-442544
Fax: 01493-441200
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: MIS

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ❑ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** £ 4,000
5. **Complete (fully capable) software system cost:** £ 7,000

USER BASE

6. **Total number of licensed users:** 5
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 5
   North America:
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: annual fee
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: not reported
19. **Minimum hardware configuration:** 486, 33 MHz, 16 MB RAM, ½ GB disk
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	all leading makes supported	
■ Frame Grabbers:		
■ Scanners:	any scanner supported if it produces standard formatted images	
■ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		All standard makes
■ Film Recorders:		via an exhaustive
■ Electrostatic Plotters:		library of drivers
■ Pen Plotters:		
■ Ink Jet Printers:		
■ Laser Printers:		
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: Access
26. **Data Exchange Formats Supported:** not reported

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	❑ Change Map Projections
■ Topographical Structuring	❑ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: not reported

PRODUCT NAME: INFOSO with Photomap Professional

COMPANY/ORGANIZATION

Company Name: A/O Kiberso
Contact Person(s): Valery Zolotorev
Street Address: Aviamotornaya 53
City, State: Moscow
Zip, Country: Russia
Phone: 7-095-273-9216
Fax: 7-095-273-1937
Email: not reported

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ■ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** $10,000
5. **Complete (fully capable) software system cost:** $50,000

USER BASE

6. **Total number of licensed users:** 500
7. **Number of licensed users by continent:**
   Africa:_____
   Asia:_____
   Australia:_____
   Europe: 500
   North America:_____
   South America:_____
8. **Year of first installation:** 1994

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ❑ Tutorials ■ Other: on-site training
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: within former USSR
11. **Cost of support:** ❑ Included in License ■ Other: separate support agreement
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: quarterly
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:_____

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ❑ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ■ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Silicon Graphics - IRIX v5.2
19. **Minimum hardware configuration:** PC 286
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:		
❑ Frame Grabbers:		
■ Scanners:	AGFA, EIKONIX, INTERGRAPH	
■ GPS:	Trimble	
■ CD-ROM:		
■ Diskette:		
■ Tape:	AIC-80; 8 mm	
■ Displays:		EGA, VGA, SVGA
❑ Film Recorders:		
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
❑ Ink Jet Printers:		
❑ Laser Printers:		
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ■ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** DXF
27. **If GIS Product:** ❑ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ❑ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ❑ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ❑ Vector Overlay Analysis
- ■ Surface Modeling
- ❑ Buffer generation
- ❑ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ■ Image Mosaicking
- ■ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ■ Filtering
- ❑ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ■ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: not reported

PRODUCT NAME: LAMPS

COMPANY/ORGANIZATION

Company Name: Laser-Scan Ltd.
Contact Person(s): Paul Hardy
Street Address: Cambridge Science Park, Milton Road
City, State: Cambridge
Zip, Country: CB4 4FY, UK
Phone: 44-01223-420414
Fax: 44-01223-420044
Email: paul@lsl.co.uk

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: Mapping

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** not reported
5. **Complete (fully capable) software system cost:** not reported

USER BASE

6. **Total number of licensed users:** not reported
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1980

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: maintenance contract
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ■ VAX/VMS ■ Other: Open VMS Alpha
19. **Minimum hardware configuration:** Smallest VMS Alpha station or VAX station currently sold by DEC.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	ALTEK, Summagraphics, Calcomp Mutoh, GTCO, Kontron, etc.	
❑ Frame Grabbers:		
■ Scanners:	TIFF, Scitex, Anatech, Vidar, Hell, Joyce Loebl, Scan-Graphics	
❑ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		X-terminals
■ Film Recorders:		Barco, Eghergrad
■ Electrostatic Plotters:		Calcomp, Versatek, etc.
■ Pen Plotters:		Calcomp, HPGL
■ Ink Jet Printers:		HP, Calcomp
■ Laser Printers:		PostScript
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ❑ C++ ■ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph

❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: Rdb, INGRES

26. Data Exchange Formats Supported: DXF, ARC/Info, NTF, DCW, DIGIT, DLG, GDB, IMAP, KERN, MAPDATA, MGD, CEDD, MGDS, OSTF, GIF, TDST, DFAD, DTED, I^2S, DEM, MNT

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
■ Network Flow Analysis
■ Cell-based (Raster) Modeling
■ Map Composition/Generation
■ Raster-Vector Conversion
■ Edgematching
■ Map Display & Query
■ Change Map Projections
■ Datum Changes
■ Vector Overlay Analysis
■ Surface Modeling
■ Buffer generation
■ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

■ Interactive Display
■ Geometric Rectification
■ Image Mosaicking
❑ Radiometric Corrections
■ Raster GIS Modeling
■ Hardcopy Map Comp./Anno.
■ Filtering
❑ Supervised Classification
■ Image Enhancement
■ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Terrain model creation and visualization; production flowline control

PRODUCT NAME: LAMPS² - Object Oriented Mapping

COMPANY/ORGANIZATION

Company Name: Laser-Scan
Contact Person(s): Paul Hardy
Street Address: Cambridge Science Park, Milton Road
City, State: Cambridge
Zip, Country: CB4 4FY, UK
Phone: 44-01223-420414
Fax: 44-01223-420044
Email: paul@lsl.co.uk

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: Mapping

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** not reported
5. **Complete (fully capable) software system cost:** not reported

USER BASE

6. **Total number of licensed users:** 4
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 4
   North America:
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: maintenance contract
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Sun Solaris 2 and Motif; DEC Alpha AXP and Motif.
19. **Minimum hardware configuration:** Workstation with 64 MB memory, 2 GB disk.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Calcomp, Altek	
❑ Frame Grabbers:		
■ Scanners:	TIFF	
❑ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		X-terminals
■ Film Recorders:		Barco, Eghergrad
■ Electrostatic Plotters:		Calcomp
❑ Pen Plotters:		
■ Ink Jet Printers:		HP, Calcomp (PostScript)
■ Laser Printers:		PostScript
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: INGRES
26. **Data Exchange Formats Supported:** DXF, ARC/Info, GIF, TIFF

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ❑ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ■ Image Mosaicking
- ❑ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ■ Filtering
- ❑ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Object-oriented spatial database is fully versioned for handling change over time and long transactions on very large multi-user continuous datasets. Data is not just x,y and attributes, but objects which have behaviors.

PRODUCT NAME: LAS/ADAPS (Land Analysis System / AVHRR Data Acquisition and Processing System)

COMPANY/ORGANIZATION

Company Name: EROS Data Center
Contact Person(s): Jim Fenno
Street Address: Mundt Federal Building
City, State: Sioux Falls, SD
Zip, Country: 57198, USA
Phone: 605-594-6833
Fax: 605-594-6940
Email: fenno@sg2.cr.usgs.gov

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   - ◆ **Public Domain:**
     Costs for Distribution/Documentation: Available to government agencies and universities only at cost of reproduction
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** not reported
5. **Complete (fully capable) software system cost:** not reported

USER BASE

6. **Total number of licensed users:** 34
7. **Number of licensed users by continent:**
   Africa: 2
   Asia: 1
   Australia: 1
   Europe: 3
   North America: 27
   South America:
8. **Year of first installation:** 1983

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ❑ Tutorials ■ Other: Not available
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: For cooperating agencies
11. **Cost of support:** ❑ Included in License ■ Other: N/A
12. **Software updates:** ❑ Annually ❑ Semiannually ❑ Other: Not scheduled
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: None

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ❑ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ■ Other: Minimal GUI for certain applications

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Silicon Graphics IRIX 5.3, Sun SunOS 4.1.3, Data General DGUX 5.4.1
19. **Minimum hardware configuration:** 2 GB disk, tape devices (3480, 8mm, 9 track, 4 mm), 8 or 24 bit color monitor.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
■ CD-ROM:		
❑ Diskette:		
■ Tape:	3480, 8 mm, 4 mm, 9 track	Same
■ Displays:		X-terminals
■ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		
❑ Ink Jet Printers:		
■ Laser Printers:		
❑ Others:		

21. **Source code available:** ◆ Yes: ■ C ❑ C++ ■ FORTRAN ❑ Pascal ❑ Other:_____
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress

❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: binary transfer file

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	❑ Map Display & Query
❑ Digital Map Editing	■ Change Map Projections
❑ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
■ Raster-Vector Conversion	❑ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	■ Fourier Analysis
■ Radiometric Corrections	■ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
■ Filtering	❑ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Applications may be modified to work with specific vendor I/O devices.

PRODUCT NAME: LASER WALKABOUT V 2.0

COMPANY/ORGANIZATION

Company Name: Laser Technology, Inc.
Contact Person(s): Blair Zukan
Street Address: 7070 S. Tucson Way
City, State: Englewood, CO
Zip, Country: 80112, USA
Phone: 303-649-1000
Fax: 303-649-9710
Email: lasertek@ix.netcom.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other:
   License fee is: ❑ One Time Charge ■ Other Charge: per unit charge
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◊ No
4. **Basic (minimal) software system cost:** $2,200.00
5. **Complete (fully capable) software system cost:** $14,175

USER BASE

6. **Total number of licensed users:** 105
7. **Number of licensed users by continent:**
   Africa: 1
   Asia: 5
   Australia: 10
   Europe: 8
   North America: 79
   South America: 2
8. **Year of first installation:** 1994

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ■ Other: per update fee optional

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ■ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** IBM 386, 4 MB RAM, 4 MB of disk space
20. **Devices supported:**

	INPUT	**OUTPUT**
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
■ GPS:	All GPS receivers - along with Laser Range-finder _____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ❑ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
❑ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	■ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	■ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: LASER WALKABOUT is a field data collection system for use in gathering information, both spatial and feature/attribute, to populate GIS database. LASER WALKABOUT works with GPS and Laser Rangefinder to make data collection faster than with GPS alone. Data may be exported to any GIS system.

PRODUCT NAME: MAPS IN ACTION for Windows

COMPANY/ORGANIZATION

Company Name: Action Information (Management) Ltd.
Contact Person(s): John Page
Street Address: Ashton Road
City, State: Hilperton, Nr. Trowbridge, Wiltshire
Zip, Country: BA14 7SZ UK
Phone: 44-01225-751616
Fax: 44-01225-751616
Email: N/A

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other: Or to suit requirements
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** £9000 (sterling)
5. **Complete (fully capable) software system cost:** £16000 (sterling)

USER BASE

6. **Total number of licensed users:** 200
7. **Number of licensed users by continent:** Africa: 5
   Asia:
   Australia:
   Europe: 195
   North America:
   South America:
8. **Year of first installation:** 1994

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: Support contract available
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ❑ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A

17. User interface: ❑ Command Line ❑ Menus ■ User-Customizable Menus
❑ User-Generated Macros ■ Other: Touch screen buttons user customizable

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: IBM compatible 486 / 66MHZ, 16 MB RAM

20. Devices supported:

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
■ GPS:	Various	
■ CD-ROM:	_____	
■ Diskette:	3.5 inch	
❑ Tape:	_____	
■ Displays:		VGA, SVGA up to 1278 x 1024 resolution, optional touch screen
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
■ Ink Jet Printers:		HP compatible - HPGL and HPGL supported
■ Laser Printers:		HP and others
❑ Others:	_____	_____

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◆ No

24. Integrated Data Base Management System: ◊ Yes ◊ No

25. Data Base File Types Supported: ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: not reported

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing	■ Map Display & Query
❑ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: MAPS IN ACTION for Windows has been specifically designed for decision makers and offers fast response and intuitive operation. The software is extremely flexible, the user interface is configurable, and MAPS IN ACTION for Windows may be interfaced to other applications - using standard Windows communications routines, RS232 serial communications or network communications. Both stand alone and networked solutions are available.

PRODUCT NAME: MAPS 3D Digital Mapping Solutions

COMPANY/ORGANIZATION

Company Name: Pacific International Mapping Corp.
Contact Person(s): Michael Layland
Street Address: 101 4218 Commerce Circle
City, State: Victoria, B.C.
Zip, Country: V8Z 6N6, Canada
Phone: 1-604-727-0727
Fax: 1-604-727-3153
Email: maps3d@pim.bc.ca

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: Digital Mapping Software

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** US $6490
5. **Complete (fully capable) software system cost:** Typically US $15000, (System is modular, application-configurable.

USER BASE

6. **Total number of licensed users:** 310
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 2
   North America: 304
   South America: 4
8. **Year of first installation:** 1989

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other: For first year, charge for subsequent years
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other: on average, no fixed cycle

13. Cost of updates: ■ Included in License or Maintenance Contract ❑ Other:_____

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ❑ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A

17. User interface: ■ Command Line ■ Menus ■ User-Customizable Menus
❑ User-Generated Macros ❑ Other: follows microstation styles

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: 486 PC, 16 MB system memory, 14" VGA or SVGA and second graphics monitor and Hercules, 12" x 12" digitizing tablet

20. Devices supported:

	INPUT	OUTPUT
■ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
■ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
■ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
■ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◆ Yes: ❑ C ■ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ■ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: not reported

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
■ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: A production toolbox for digital mapping including data acquisition and topological cleaning. System is modular allowing configuration of system to application requirements. Work with, and requires, microstation PC.

PRODUCT NAME: MAPTITUDE

COMPANY/ORGANIZATION

Company Name: Caliper Corporation
Contact Person(s): Jack MacDougall
Street Address: 1172 Beacon Street
City, State: Newton, MA
Zip, Country: 02161-9926, USA
Phone: 617-527-4700
Fax: 617-527-5113
Email: info@caliper.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge: $395
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** $395
5. **Complete (fully capable) software system cost:** $395

USER BASE

6. **Total number of licensed users:** 1000 +
7. **Number of licensed users by continent:** Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: periodic
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: to be determined

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ❑ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A

17. User interface: ❑ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ■ Other: toolbars and toolboxes

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: 80486, Windows 3.1, 8 MB RAM, 16 MB disk space, CD-ROM

20. Devices supported:

	INPUT	OUTPUT
■ Digitizers:	Any with Wintab driver	
❑ Frame Grabbers:		
■ Scanners:	Indirectly; Maptitude can display TIFF files	
■ GPS:	Various, with Maptitude GPS add-in	
■ CD-ROM:	Any, with appropriate driver	
■ Diskette:	Any, with appropriate driver	Any, with appropriate driver
■ Tape:	Any, with appropriate driver	Any, with appropriate driver
■ Displays:		Any, with appropriate driver
■ Film Recorders:		Any, with appropriate driver
■ Electrostatic Plotters:		Any, with appropriate driver
■ Pen Plotters:		Any, with appropriate driver
■ Ink Jet Printers:		Any, with appropriate driver
■ Laser Printers:		Any, with appropriate driver
❑ Others:		

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◆ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: Any with ODBC driver

26. Data Exchange Formats Supported: DXF, MIF, BNA, EOO, TIGER/LINE, UNGEN, ETAK STREETS,

etc.

27. If GIS Product: ❑ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◆ No

Please describe additional features: Includes two full CD-ROMs of geographic and demographic data, derived largely from TIGER/LINE files, 1990 census of population and housing, National Highway Planning Network and Digital Chart of the World. From one CD can address match, route and display using all 36 million plus street segments in TIGER/LINE files. Supports OLE 2.0 optional $395 programming language, the GISDK.

PRODUCT NAME: Market Analysis

COMPANY/ORGANIZATION

Company Name: Laser-Scan
Contact Person(s): Parvis Ansary, Tim Hartnall
Street Address: Cambridge Science Park, Milton Road
City, State: Cambridge
Zip, Country: CB4 4FY, UK
Phone: 44-01223-420414
Fax: 44-01223-420044
Email: parvis@lsl.co.uk, tim@lsl.co.uk

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ❑ Other: as required
   License fee is: ■ One Time Charge ■ Other Charge: negotiable
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** £20,000
5. **Complete (fully capable) software system cost:** £29,00 (inclusive of 1st years support)

USER BASE

6. **Total number of licensed users:** 5
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 5
   North America:
   South America:
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: 15% of software cost
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: AIX - IBM; Ultrix - Digital; Sun/OS, Solaris - SUN
19. **Minimum hardware configuration:** 64 MB (RAM), 400 MB (min.) H/D space avail., HP (9000, 733, 750), CRX color graphics, HP-UX Workstation, SUN (Sparc 2, or Sparc X series) 100/200 models, GX color graphics, Solaris (1-1) (Open Windows v3.0), OSF/Motif mwm, IBM (RS 6000), skyways color graphics, AIX 3L, Fortran RT/L, X-Window devt. lib's.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
■ Frame Grabbers:	_____	
■ Scanners:	_____	
❑ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph

❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: INGRES

26. Data Exchange Formats Supported: DXF, ARC/Info, GIF, TIFF

27. If GIS Product: ❑ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: 1) Extensible "toolkit" functionality. (Option) 2) Fully integrated development environment.

PRODUCT NAME: Mobile - G.I.S.

COMPANY/ORGANIZATION

Company Name: Procis Software Ltd.
Contact Person(s): Pammi Panesar
Street Address: Alexander House, Flemming Way
City, State: Swindon
Zip, Country: SN1 2NG, UK
Phone: 01793-541200
Fax: 01793-541025
Email: Not reported

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: Mobile GIS

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** variable
5. **Complete (fully capable) software system cost:** variable

USER BASE

6. **Total number of licensed users:** 250
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 250
   North America:
   South America:
8. **Year of first installation:** 1992

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: Europe
11. **Cost of support:** ❑ Included in License ■ Other: Annual charge
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ■ Other: New facilitation extra

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Dutch
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** Mono/color pen machine for field use and 486 PC for office data management system.
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
■ GPS:		
❑ CD-ROM:		
■ Diskette:		
❑ Tape:		
■ Displays:		Color/mono
❑ Film Recorders:		
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
■ Ink Jet Printers:		
■ Laser Printers:		
■ Others:	PCMCIA cards, corp. GIS databases	Mobile printers, radio data transfer

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ■ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ■ Vector ■ Raster
28. **GIS Functionality:**

■ Map Digitizing
■ Digital Map Editing
❑ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

❑ Map Display & Query
❑ Change Map Projections
❑ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
❑ Buffer generation
❑ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Mobile - G.I.S. extends corporate GIS to field operators in an easy to use but comprehensive package for portable computers. It enables users to access a very large map and database and collect text and graphical information at source. Its office based management system (MGIMS) provides the same GIS functionality as MGIS for use within the office, but more importantly, it acts as a central point, facilitating the bi-directional data communication between MGIS and any corporate GIS system. It also allows information to be "broadcast" from one MGIS user to all others.

PRODUCT NAME: MultiSpec

COMPANY/ORGANIZATION

Company Name: Purdue University
Contact Person(s): Prof. David Landgrebe, Larry Biehl
Street Address: EE Building
City, State: West Lafayette, IN
Zip, Country: 47907-1285, USA
Phone: 317-494-3529
Fax: 317-494-6951
Email: landbreb@ecn.purdue.edu, biehl@ecn.purdue.edu

1. **Type of product:**
   ❑ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   - ◆ **Public Domain**
     Costs for Distribution/Documentation: Available from Web
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** --
5. **Complete (fully capable) software system cost:** --

USER BASE

6. **Total number of licensed users:** >500
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1988

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ❑ Worldwide ■ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: periodically
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A

17. User interface: ❑ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
❑ Windows/NT ■ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: MAC: 680XD based with or without math coprocessor and Power PC based machines; IBM comp.: 386 or better and Windows 3.1; color display

20. Devices supported:

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
■ Ink Jet Printers:		Any Macintosh compatible
■ Laser Printers:		Any Macintosh compatible
❑ Others:	_____	_____

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◆ No

22. Batch capability: ◊ Yes ◆ No

23. Linkable libraries for data structure access: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◆ No

24. Integrated Data Base Management System: ◊ Yes ◆ No

25. Data Base File Types Supported: ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: Many BIL, BSQ, BIS or BIP binary formats

27. If GIS Product: ❑ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing ❑ Map Display & Query
❑ Digital Map Editing ❑ Change Map Projections

❑ Topographical Structuring ❑ Datum Changes
❑ Network Flow Analysis ❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling ❑ Surface Modeling
❑ Map Composition/Generation ❑ Buffer generation
❑ Raster-Vector Conversion ❑ Line-of-Sight Analysis
❑ Edgematching ❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display ❑ Image Enhancement
❑ Geometric Rectification ❑ Spatial Filtering
❑ Image Mosaicking ❑ Fourier Analysis
❑ Radiometric Corrections ❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling ❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno. ❑ Principal Components Analysis
❑ Filtering ❑ Density Slicing
❑ Supervised Classification ❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◊ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: not reported

PRODUCT NAME: NTF PORTFOLIO

COMPANY/ORGANIZATION

Company Name: Longdin & Browning
Contact Person(s): T. Lox
Street Address: 50 Sketty Road
City, State: Swansea, West Glamorgan
Zip, Country: SA2 OLH, UK
Phone: 01792-202244
Fax: 01792-203333
Email: Compuserv 100271,2433

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ■ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** £600
5. **Complete (fully capable) software system cost:** £600

USER BASE

6. **Total number of licensed users:** 270
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 270
   North America:
   South America:
8. **Year of first installation:** 1989

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: 100
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: as and when, usually 6 months
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** PC/DOS - 640K
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
■ CD-ROM:	DOS compat.	
■ Diskette:	DOS compat.	DOS file or screen
❑ Tape:		
❑ Displays:		
❑ Film Recorders:		
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
❑ Ink Jet Printers:		
❑ Laser Printers:		
❑ Others:		

21. **Source code available:** ◆ Yes: ■ C ■ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** Any ASCII
27. **If GIS Product:** ■ Vector ❑ Raster
28. **GIS Functionality:**

❑ Map Digitizing
❑ Digital Map Editing
■ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
■ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

■ Map Display & Query
❑ Change Map Projections
❑ Datum Changes
■ Vector Overlay Analysis
❑ Surface Modeling
❑ Buffer generation
❑ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Autodesk compliant and standalone DOS/Windows

PRODUCT NAME: OrthoMax

COMPANY/ORGANIZATION

Company Name: Vision International, of Autometric, Inc.
Contact Person(s): Richard Mckay
Street Address: 5301 Shawnee Road
City, State: Alexandria, VA
Zip, Country: 22312, USA
Phone: 703-658-4000
Fax: 703-658-4426
Email: mckay@autometric.com

1. **Type of product:**
   ❑ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $20,000
5. **Complete (fully capable) software system cost:** $30,000

USER BASE

6. **Total number of licensed users:** 500
7. **Number of licensed users by continent:**
   Africa: 20
   Asia: 30
   Australia: 15
   Europe: 100
   North America: 300
   South America: 50
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:_____
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:_____
11. **Cost of support:** ❑ Included in License ■ Other: 15%
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:_____
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:_____

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other: GUI

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Silicon Graphics Sun
19. **Minimum hardware configuration:** SUN SparcStation
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** ERDAS Imagine
27. **If GIS Product:** ❑ Vector ❑ Raster

28. GIS Functionality:

❑ Map Digitizing	❑ Map Display & Query
❑ Digital Map Editing	❑ Change Map Projections
■ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	■ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	❑ Fourier Analysis
■ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
■ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Developed for the GIS community, OrthoMax is high performance soft-copy terrain mapping and precise geopositioning. OrthoMax is sold as a module of ERDAS Imagine.

PRODUCT NAME: PAMAP GIS v4.2

COMPANY/ORGANIZATION

Company Name: EPS Essential Planning Systems Ltd.
Contact Person(s): Alison Malis, Marketing Communications Mgr.
Street Address: 6772 Oldfield Road, Suite 200
City, State: Victoria, B.C.
Zip, Country: V8M 2A2, Canada
Phone: 604-652-8895
Fax: 604-652-8896
Email: marketing@eps.bc.ca

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $5,000 US
5. **Complete (fully capable) software system cost:** up to $20,500 US

USER BASE

6. **Total number of licensed users:** 1000+
7. **Number of licensed users by continent:**
   Africa: 75
   Asia: 150
   Australia:
   Europe:
   North America: 725
   South America: 50
8. **Year of first installation:** 1986

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: $2,500/yr
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ■ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** Intel i386, i486 or Pentium Processor, DOS 5.0 or higher, MS Windows 3.1, Windows for Workgroups 3.11, Windows 95 and Windows NT, 4MB of application RAM or greater, 256-color display adaptor, 20MB of free disk space on hard drive.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
■ Frame Grabbers:	_____	
■ Scanners:	_____	
■ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	_____
■ Tape:	_____	_____
❑ Displays:		_____
❑ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: Any dBase format database; FoxPro
26. **Data Exchange Formats Supported:** IGDS, DXF, ARC/Info, SPANS, Point Import/Export, MOSS, DLG,

USGS DEM, SIF, SVF, Generic Raster format (user-defined)

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: PAMAP GIS is an integrated raster/vector/database system designed for use on the PC platform. It emphasizes ease of use, offers a full suite of cartographic tools for high quality presentations, provides comprehensive functionality - from simple queries to 3D modelling - and has a development environment for user-interface customization. PAMAP GIS is comprised of seven modules and ten data translators. Users need only purchase the modules required for their application. PAMAP has installations worldwide primarily in the natural resource, environmental and land management areas.

PRODUCT NAME: PC-GPS

COMPANY/ORGANIZATION

Company Name: Corvallis Microtechnology, Inc.
Contact Person(s): Eric Gakstatter
Street Address: 413 SW Jefferson Ave.
City, State: Corvallis, OR
Zip, Country: 97333, USA
Phone: 503-752-5456
Fax: 503-752-4117
Email: ericpg@peak.org

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** US$1430.00
5. **Complete (fully capable) software system cost:** US$1430.00

USER BASE

6. **Total number of licensed users:** N/A
7. **Number of licensed users by continent:** Africa: N/A
   Asia: N/A
   Australia: N/A
   Europe: N/A
   North America: N/A
   South America: N/A
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: Varies

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ■ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 486DX, 2MB RAM, 100MB Hard disk
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
■ Frame Grabbers:	_____	
■ Scanners:	_____	
■ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
■ Displays:		_____
❑ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ♢ Yes ♢ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ■ C++ ❑ FORTRAN
    ❑ Pascal ■ Other: VBASIC
    ♢ No
24. **Integrated Data Base Management System:** ◆ Yes ♢ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: ODBC
26. **Data Exchange Formats Supported:** ESRI Shapefile, DXF
27. **If GIS Product:** ■ Vector ❑ Raster
28. **GIS Functionality:**

■ Map Digitizing
■ Digital Map Editing
❑ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

■ Map Display & Query
■ Change Map Projections
■ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
■ Buffer generation
❑ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: PC-GPS is a complete Windows-based GPS program that is a companion product for the MC-GPS field data collection unit. It includes satellite planning, map editting, GIS export, Differential correction using base station data from other manufacturers' base stations. PC-GPS is an OLE compliant program and also supports ODBC. Together with the MC-GPS, PC-GPS is a complete GPS data collection system for digitizing information in the field.

PRODUCT NAME: PRISM

COMPANY/ORGANIZATION

Company Name: DATRON/TRANSCO, Inc.
Contact Person(s): Jacques Huyghe
Street Address: 1500 Buckeye Drive
City, State: Milpitas, CA
Zip, Country: 95035, USA
Phone: 408-432-3400
Fax: 408-433-0965
Email: jhuyghe@i2s.com

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: Photogrammetry

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ■ Site ■ Other: networked floating licenses
   License fee is: ■ One Time Charge ■ Other Charge: maintenance
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $12,000
5. **Complete (fully capable) software system cost:** $35,000

USER BASE

6. **Total number of licensed users:** 70
7. **Number of licensed users by continent:**
   Africa: 5
   Asia: 20
   Australia:
   Europe: 20
   North America: 25
   South America:
8. **Year of first installation:** 1992

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ■ Other: yearly fee
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ■ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ■ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: SUN SGI HP, SUN only for STERO
19. **Minimum hardware configuration:** 64MB of memory, 300MB of disk space
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	mouse, Calcomp, Altek, Summagraphic	
■ Frame Grabbers:	Workstation Department	
■ Scanners:	all TIFF, PostScript, BIL, BSQ types	
■ GPS:	support for ASCII, XYZ files	
■ CD-ROM:		
❑ Diskette:		
■ Tape:	8mm, 9 track, 1/4 QIC	
■ Displays:		All Window
■ Film Recorders:		All TIFF and PostScript
■ Electrostatic Plotters:		All TIFF and PostScript
■ Pen Plotters:		All TIFF and PostScript
■ Ink Jet Printers:		All TIFF and PostScript
■ Laser Printers:		All TIFF and PostScript
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ■ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** ERDOS, BIC, BSQ, TIFF, DXF

27. If GIS Product: ❑ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	❑ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
❑ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
■ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	■ Line-of-Sight Analysis
■ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	■ Fourier Analysis
■ Radiometric Corrections	■ Multivariate/Statistical Analysis
■ Raster GIS Modeling	■ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	■ Principal Components Analysis
■ Filtering	■ Density Slicing
■ Supervised Classification	■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: not reported

PRODUCT NAME: RootsPRO

COMPANY/ORGANIZATION

Company Name: Decision Images, Inc.
Contact Person(s): Bob Mills
Street Address: PO Box 513
City, State: Princeton, NJ
Zip, Country: 08542, USA
Phone: 609-683-0234
Fax: 609-683-4068
Email: decision@tigger.jvnc.net

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** $1495
5. **Complete (fully capable) software system cost:** $1495

USER BASE

6. **Total number of licensed users:** 400+
7. **Number of licensed users by continent:** Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1990

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: when done!
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ■ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 386/486 with 4MB RAM, Mac with 4MB RAM
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	all serial tablets	
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
❑ CD-ROM:		
■ Diskette:	dxf, many other formats	
❑ Tape:		
❑ Displays:		
❑ Film Recorders:		
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
❑ Ink Jet Printers:		
❑ Laser Printers:		
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** DXF, ARC/INFO GEN, DLG, many others
27. **If GIS Product:** ■ Vector ❑ Raster
28. **GIS Functionality:**

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
■ Edgematching

❑ Map Display & Query
❑ Change Map Projections
❑ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
❑ Buffer generation
❑ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: not reported

PRODUCT NAME: RTView

COMPANY/ORGANIZATION

Company Name: Trix Systems, Inc.
Contact Person(s): Chris Sweetnam
Street Address: 68 Smith St.
City, State: Chelmsford, MA
Zip, Country: 01824, USA
Phone: 800-326-4443 or 508-256-4445
Fax: 508-256-9593
Email: swwetnam@trixsystems.com

1. **Type of product:**
   ❑ GIS ■ Image Processing ■ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other: $130-1,500
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** $130
5. **Complete (fully capable) software system cost:** $1,500

USER BASE

6. **Total number of licensed users:** 200
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ❑ Tutorials ■ Other: Consulting
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
■ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Swedish

16. Online help: ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A

17. User interface: ❑ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: not reported

20. Devices supported:

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. Source code available: ◆ Yes: ■ C ■ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◊ No

22. Batch capability: ◊ Yes ◆No

23. Linkable libraries for data structure access: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: Many raster and vector formats

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing
❑ Digital Map Editing
❑ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

❑ Map Display & Query
❑ Change Map Projections
❑ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
❑ Buffer generation
❑ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
■ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◊ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: Trix Systems, Inc. provides software applications for automatic paper-to-CAD (raster to vector) conversion, scanning, viewing, redlining, image file format conversion (including vector to raster), network based engineering document management and facilities management.

PRODUCT NAME: R2V for Windows/NT

COMPANY/ORGANIZATION

Company Name: Able Software Company
Contact Person(s): Dr. Yecheng Wu
Street Address: 5 Appletree Lane
City, State: Lexington, MA
Zip, Country: 02173, USA
Phone: 617-862-2804
Fax: 617-862-2640
Email: able@world.std.com

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: Raster to vector conversion

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** US $1495
5. **Complete (fully capable) software system cost:** US $1495

USER BASE

6. **Total number of licensed users:** 103
7. **Number of licensed users by continent:**
   Africa: 1
   Asia: 30
   Australia: 2
   Europe: 20
   North America: 40
   South America: 10
8. **Year of first installation:** 1994

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 486 PC or better, 4MB RAM, 1MB harddisk space, SVGA display
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
■ Scanners:	_____	
❑ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
■ Displays:		_____
■ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** ARC/INFO, DXF, MAPINFO, ARCVIEW, TIFF, SPOT
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ❑ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ❑ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ❑ Datum Changes
- ■ Vector Overlay Analysis
- ❑ Surface Modeling
- ❑ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ■ Filtering
- ■ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ❑ Fourier Analysis
- ■ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: R2V generates vector data automatically from scanned maps, aerial photos or satellite imagery in color or black-white. R2V provides complete on-screen vector editing functionalities and supports map registration to a user specified projection system.

PRODUCT NAME: SHL VISION* Solutions

COMPANY/ORGANIZATION

Company Name: SHL Systemhouse, Inc.
Contact Person(s): Karen Westwood
Street Address: 50 O'Connor Street, Suite 501
City, State: Ottawa, Ontario
Zip, Country: K1P 6L2, Canada
Phone: 613-236-9734
Fax: 613-567-5433
Email: kwestwood@gis.shl.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other: Spatial data management

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ❑ Site ■ Other: Company, # of concurrent users
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $10 K
5. **Complete (fully capable) software system cost:** enterprise and configuration dependent

USER BASE

6. **Total number of licensed users:** over 5000 +
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1990

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: 15% of software list price
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ■ Other: National language support - enabled
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ■ User-Generated Macros ■ Other: user designed interface

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: DEC, IBM, SUN, HP, Motif, Microsoft Windows
19. **Minimum hardware configuration:** dependent on the platform and O/S and user requirements
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph

❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: GINA, DXF, SIF, Translation Toolkit

27. If GIS Product: ■ Vector ❑ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
■ Network Flow Analysis
❑ Cell-based (Raster) Modeling
■ Map Composition/Generation
❑ Raster-Vector Conversion
■ Edgematching
■ Map Display & Query
■ Change Map Projections
❑ Datum Changes
■ Vector Overlay Analysis
■ Surface Modeling
■ Buffer generation
■ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification
❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: The VISION* architecture is unique - it abandons the outdated concept of the proprietary database used by traditional GIS and uses an open commercial database (Oracle) as the database engine. This allows our clients to maximize the return from their existing data with fully integrated spatial extensions. The result is a database foundation that supports multiple departments in even the most complex enterprise.

PRODUCT NAME: SoftPlotter

COMPANY/ORGANIZATION

Company Name: Vision International, of Autometric, Inc.
Contact Person(s): Richard Mckay
Street Address: 5301 Shawnee Road
City, State: Alexandria, VA
Zip, Country: 22312, USA
Phone: 703-658-4000
Fax: 703-658-4426
Email: rmckay@autometric.com

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other:_____
   License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $40,000
5. **Complete (fully capable) software system cost:** $60,000

USER BASE

6. **Total number of licensed users:** 132
7. **Number of licensed users by continent:**
   Africa:_____
   Asia: 5
   Australia: 2
   Europe: 20
   North America: 100
   South America: 5
8. **Year of first installation:** 1994

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:_____
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:_____
11. **Cost of support:** ❑ Included in License ■ Other: 15%
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:_____
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:_____

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ■ Other: GUI

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Silicon Graphics, Sun, DEC Alpha
19. **Minimum hardware configuration:** SGI Indy
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ■ Sybase ■ Other: SQS
26. **Data Exchange Formats Supported:** ERDAS Imagine and raw binary
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing	❑ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	■ Surface Modeling
■ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
■ Edgematching	❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display	■ Image Enhancement
■ Geometric Rectification	■ Spatial Filtering
■ Image Mosaicking	❑ Fourier Analysis
■ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
■ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: The preeminent softcopy digital photogrammetry software on the market. SoftPlotter provides the functionality and performance demanded by professional mapping organizations.

PRODUCT NAME: SPACE WINDOWS

COMPANY/ORGANIZATION

Company Name: Geographic Management Solutions Limited
Contact Person(s): John Standerline
Street Address: 12 Turnpike Gate
City, State: Wickwar, Wotton-under-Edge, Gloucestershire
Zip, Country: GL12 8ND, UK
Phone: 44-1454-294948
Fax: 44-1454-294948
Email: not reported

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $15,000
5. **Complete (fully capable) software system cost:** $15,000

USER BASE

6. **Total number of licensed users:** 600
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 550
   North America:
   South America: 50
8. **Year of first installation:** 1990

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: annual fee

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ■ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 486 PC
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
■ Frame Grabbers:	_____	
■ Scanners:	_____	
■ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
■ Others: Video	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ❑ Surface Modeling
- ❑ Buffer generation
- ❑ Line-of-Sight Analysis
- ❑ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ■ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: not reported

PRODUCT NAME: SPACE/Motif

COMPANY/ORGANIZATION

Company Name: APIC S.A.
Contact Person(s): Pierre Tarif, Marketing Director
Street Address: Le Baudran, 25, Rue de Stalingrad
City, State: Arcueil
Zip, Country: 94724 Ceder, France
Phone: 33-1-49-69-90-90
Fax: 33-1-49-69-92-93
Email: ifo@apic.fr

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other: software component

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** $8,000
5. **Complete (fully capable) software system cost:** $17,000

USER BASE

6. **Total number of licensed users:** 100
7. **Number of licensed users by continent:** Africa:
   Asia:
   Australia:
   Europe: 100
   North America:
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: Maintenance contract available
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: 2/year
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ■ Basic ■ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Sun - Solaris 1 / Sun - Solaris 2 / HP - UX9 / IBM - AIX
19. **Minimum hardware configuration:** RAM 32MB
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
❑ CD-ROM:		
❑ Diskette:		
❑ Tape:		
❑ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		HPGL2, PostScript
❑ Pen Plotters:		
❑ Ink Jet Printers:		
❑ Laser Printers:		
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊◆ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ■ Sybase ■ Other: Object-Oriented / Informix / Ingres
26. **Data Exchange Formats Supported:** DXF / EDIGEO / NTF / ASCII / APIC IED

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	■ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Multi-bases access (simultaneous access to several databases by one user).

PRODUCT NAME: SPACE/Windows

COMPANY/ORGANIZATION

Company Name: APIC S.A.
Contact Person(s): Pierre Tarif, Marketing Director
Street Address: Le Baudran, 25, Rue de Stalingrad
City, State: Arcueil
Zip, Country: 94724 Ceder, France
Phone: 33-1-49-69-90-90
Fax: 33-1-49-69-92-93
Email: ifo@apic.fr

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** $2,800
5. **Complete (fully capable) software system cost:** $2,800

USER BASE

6. **Total number of licensed users:** 40
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe: 40
   North America:
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: BBS ($200 / 3 hours)
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ■ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** RAM 8MB, disk 50MB
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:		
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
❑ CD-ROM:		
❑ Diskette:		
❑ Tape:		
■ Displays:		GDI capabilities
■ Film Recorders:		PostScript
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
❑ Ink Jet Printers:		
❑ Laser Printers:		
❑ Others:		

21. **Source code available:** ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ♢ Yes ◆ No
23. **Linkable libraries for data structure access:** ♢ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ♢ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other:_____
26. **Data Exchange Formats Supported:** DXF / ASCII / APIC FED
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

❑ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	❑ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
■ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	■ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◆ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: not reported

PRODUCT NAME: Spatial Database Engine (SDE)

COMPANY/ORGANIZATION

Company Name: ESRI
Contact Person(s): Arun Rajarao
Street Address: 380 New York Street
City, State: Redlands, CA
Zip, Country: 92373, USA
Phone: 909-793-2853
Fax: 909-793-5953
Email: info@esri.com (World Wide Web URL: http://www.esri.com)

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: Spatial Database Management

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ❑ One Time Charge ❑ Other Charge: not reported
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** Contact ESRI
5. **Complete (fully capable) software system cost:** Contact ESRI

USER BASE

6. **Total number of licensed users:** N/A
7. **Number of licensed users by continent:**
   Africa: N/A
   Asia: N/A
   Australia: N/A
   Europe: N/A
   North America: N/A
   South America: N/A
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other: not reported
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ❑ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other: _____
16. **Online help:** ❑ Basic ■ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: SUN, DG, HP, SGI
19. **Minimum hardware configuration:** UNIX workstation
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	I	
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
❑ CD-ROM:		
❑ Diskette:		
❑ Tape:		
❑ Displays:		
❑ Film Recorders:		
❑ Electrostatic Plotters:		
❑ Pen Plotters:		
❑ Ink Jet Printers:		
❑ Laser Printers:		
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ■ C++ ❑ FORTRAN
    ❑ Pascal ■ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

- ❑ Map Digitizing
- ❑ Digital Map Editing
- ❑ Topographical Structuring
- ❑ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ❑ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ❑ Edgematching
- ❑ Map Display & Query
- ❑ Change Map Projections
- ❑ Datum Changes
- ❑ Vector Overlay Analysis
- ❑ Surface Modeling
- ❑ Buffer generation
- ❑ Line-of-Sight Analysis
- ❑ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: ESRI's Spatial Database Engine (SDE) is a high-performance, object-based spatial data access engine that employs true client/server architecture combined with a set of software services to perform fast, efficient spatial operations and management of large, shared, geographic data sets.

PRODUCT NAME: Spatial Query Server (SQS)

COMPANY/ORGANIZATION

Company Name: Vision International, of Autometric, Inc.
Contact Person(s): Richard Mckay
Street Address: 5301 Shawnee Road
City, State: Alexandria, VA
Zip, Country: 22312, USA
Phone: 703-658-4000
Fax: 703-658-4426
Email: rmckay@autometric.com

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: Spatial Data Handling Toolkit

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ❑ One Time Charge ❑ Other Charge: not reported
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** $3500 USD
5. **Complete (fully capable) software system cost:** $3500 USD

USER BASE

6. **Total number of licensed users:** 160
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America: 160
   South America:
8. **Year of first installation:** 1995

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: 15% License Fees
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ❑ Hypertext ■ N/A
17. **User interface:** ❑ Command Line ❑ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ■ Other: N/A

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: SGI/IRIX, SUN/SOLARIS '95, IBM/RS6000 '96, DEC/ALPHA '96
19. **Minimum hardware configuration:** not reported
20. **Devices supported:**

	INPUT	**OUTPUT**
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◆ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ■ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** not reported

27. If GIS Product: ❑ Vector ❑ Raster

28. GIS Functionality:

❑ Map Digitizing
❑ Digital Map Editing
❑ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching
❑ Map Display & Query
❑ Change Map Projections
❑ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
❑ Buffer generation
❑ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification
❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: SQS via spatial indexes, templates, and spatial query operators transforms the Sybase RDBMS into a spatial database. Spatial data may be queried along with relational data to return the desired results.

PRODUCT NAME: SPECTRUM System

COMPANY/ORGANIZATION

Company Name: Sokkia Corporation
Contact Person(s): Jon O. Clark
Street Address: 9111 Barton
City, State: Overland Park, KS
Zip, Country: 66214, USA
Phone: 913-492-4900
Fax: 913-492-0188
Email: 10237.657@compuserve.com

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: GPS/GIS Data Collection System

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $2,995
5. **Complete (fully capable) software system cost:** $13,985

USER BASE

6. **Total number of licensed users:** not available
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1994

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other: 90 days free support then $995.00/year
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other: charge for major enhancement upgrades only

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ■ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ■ Portuguese ❑ Russian ■ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 386 with coprocessor, 4MB RAM, VGA graphics and 80 MB hard disk space
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	N/A	
❑ Frame Grabbers:	N/A	
❑ Scanners:	N/A	
■ GPS:	S100 Receiver and RINEX files	
■ CD-ROM:	PC-DOS/Windows compatible	
■ Diskette:	PC-DOS/Windows compatible	PC-DOS/Windows compatible
■ Tape:	PC-DOS/Windows compatible	PC-DOS/Windows compatible
■ Displays:		PC-DOS/Windows compatible
❑ Film Recorders:		N/A
❑ Electrostatic Plotters:		N/A
❑ Pen Plotters:		N/A
■ Ink Jet Printers:		PC-DOS/Windows compatible
■ Laser Printers:		PC-DOS/Windows compatible
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ❑ C ■ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ■ INFO ■ Intergraph
    ■ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ■ Other: SDR, ERDAS, MGE, "standard" ASCII
26. **Data Exchange Formats Supported:** DXF
27. **If GIS Product:** ■ Vector ❑ Raster

28. GIS Functionality:

- ❑ Map Digitizing
- ❑ Digital Map Editing
- ❑ Topographical Structuring
- ❑ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ❑ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ❑ Edgematching
- ❑ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ❑ Vector Overlay Analysis
- ❑ Surface Modeling
- ❑ Buffer generation
- ❑ Line-of-Sight Analysis
- ❑ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Customizable attribute library for enhanced GPS data collection; Submeter positioning; GPS navigation support; Pre-mission planning for GPS field work; Offset measurements; Stream measurements

PRODUCT NAME: SPRING

COMPANY/ORGANIZATION

Company Name: INPE, National Institute for Space Research
Contact Person(s): Gilberto Camaro
Street Address: Av. Astronantas, 17J8
City, State: Sao Jose dos Campos, SP
Zip, Country: 12201-010, Brazil
Phone: 55-123-25-64-99
Fax: 55-123-25-64-68
Email: Gilberto@dpi.inpe.br

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ■ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** US $5,000 (PC version)
5. **Complete (fully capable) software system cost:** US $20,000 (UNIX version)

USER BASE

6. **Total number of licensed users:** 120
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America: 120
8. **Year of first installation:** 1992

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ❑ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____

16. Online help: ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A

17. User interface: ■ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ■ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ■ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: 32MB RAM, 8 bit graphics board, 1GB disk.

20. Devices supported:

	INPUT	OUTPUT
■ Digitizers:	Calcomp, Kurta	
■ Frame Grabbers:	TIFF format	
■ Scanners:	RLE, TIFF formats	
❑ GPS:		
■ CD-ROM:		
❑ Diskette:		
■ Tape:	8mm, DAT-4mm, QIC-150	Same
■ Displays:		X-Windows, 8/24 bits
■ Film Recorders:		PostScript, TIFF formats
■ Electrostatic Plotters:		PostScript, HPGL formats
■ Pen Plotters:		HPGL format
■ Ink Jet Printers:		HPGL format
■ Laser Printers:		PostScript
❑ Others:		

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◊ No

22. Batch capability: ◊ Yes ◆ No

23. Linkable libraries for data structure access: ◆ Yes: ❑ C ■ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: Ingres

26. Data Exchange Formats Supported: Not reported

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
❑ Network Flow Analysis
■ Cell-based (Raster) Modeling
■ Map Composition/Generation
■ Raster-Vector Conversion
■ Edgematching

■ Map Display & Query
■ Change Map Projections
■ Datum Changes
❑ Vector Overlay Analysis
■ Surface Modeling
■ Buffer generation
■ Line-of-Sight Analysis
■ Map Joining

29. Image Processing Functionality:

■ Interactive Display
■ Geometric Rectification
■ Image Mosaicking
■ Radiometric Corrections
■ Raster GIS Modeling
■ Hardcopy Map Comp./Anno.
■ Filtering
■ Supervised Classification

■ Image Enhancement
■ Spatial Filtering
■ Fourier Analysis
■ Multivariate/Statistical Analysis
■ Radar Geocoding & Analysis
■ Principal Components Analysis
■ Density Slicing
■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◆ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Image segmentation, digital terrain modelling.

PRODUCT NAME: Telecomms

COMPANY/ORGANIZATION

Company Name: Laser-Scan
Contact Person(s): Parvis Ansary
Street Address: Cambridge Science Park, Milton Road
City, State: Cambridge
Zip, Country: CB4 4FY, UK
Phone: 44-01223-420414
Fax: 44-01223-420044
Email: parvis@lsl.co.uk

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ❑ System ❑ Site ❑ Other:
   License fee is: ❑ One Time Charge ■ Other Charge: both - to be negotiated
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** £20,000
5. **Complete (fully capable) software system cost:** £29,000 (including 1st year support)

USER BASE

6. **Total number of licensed users:** 80
7. **Number of licensed users by continent:**
   Africa:
   Asia: 60
   Australia:
   Europe: 20
   North America:
   South America:
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: @ 15% of software cost (£5,000 P/A)
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Korean
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: not reported
19. **Minimum hardware configuration:** 64 MB (RAM), 400 MB min. free disk space, Ingres 6.4 or Oracle 7; HP (Apollo 9000/733, 750): CRX color graphics, HP UX workstation software V9; Digital (DecStation 5000, series 100 and 200 models): PX, HX color graphics, ULTRIX workstation software 4.3; SUN (Sparc 2 or Sparc 10): GX color graphics, solaris 1.1 (CNC OPENWindows v3.0), 1X1 OSF/Motif window manager (MWM 1.1.4); IBM RS6000 (models 250, 320, 320H, 530 or 530H): Skyways color graphics, AIX 3.2, Fortran Run Time License 02.02.0100.003, Xwindow development libraries.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	_____	
■ Frame Grabbers:	_____	
■ Scanners:	_____	
■ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
■ Displays:		See above
❑ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◊ No
22. **Batch capability:** ◆ Yes ◊ No

23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN

❑ Pascal ❑ Other:_____

◊ No

24. Integrated Data Base Management System: ◆ Yes ◊ No

25. Data Base File Types Supported: ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: INGRES

26. Data Exchange Formats Supported: not reported

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	■ Buffer generation
■ Raster-Vector Conversion	■ Line-of-Sight Analysis
❑ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: 1) Extensible functionality using tool kit facility (optional). 2) Complete development environment (optional)

PRODUCT NAME: TGIS (Telecommunications Geographic Information System)

COMPANY/ORGANIZATION

Company Name: The James & Leonard Group, Ltd.
Contact Person(s): Victor La Sala, P.E., Bea Brillantino
Street Address: 87 Bethpage Rd.
City, State: Hicksville, NY
Zip, Country: 11801-1503, USA
Phone: 516-938-5666
Fax: 516-938-7796
Email: Not reported

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other:Telecommunications Management

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ■ System ■ Site ❑ Other: All
   License fee is: ■ One Time Charge ■ Other Charge: Possible custom fees
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $3,500
5. **Complete (fully capable) software system cost:** $6,000

USER BASE

6. **Total number of licensed users:** 50
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America: 50
   South America:
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: US
11. **Cost of support:** ❑ Included in License ■ Other: Annual support fee
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: As available
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other: As necessary

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ■ Basic ❑ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ■ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** 486 - 33MHz, 4MB of RAM, mouse with drivers, hard drive, Windows
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
❑ Scanners:	_____	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
■ Others: All Windows-supported devices		_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** MAPINFO
27. **If GIS Product:** ■ Vector ❑ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ❑ Topographical Structuring
- ❑ Network Flow Analysis
- ❑ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ❑ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ❑ Datum Changes
- ❑ Vector Overlay Analysis
- ❑ Surface Modeling
- ■ Buffer generation
- ❑ Line-of-Sight Analysis
- ❑ Map Joining

29. Image Processing Functionality:

- ❑ Interactive Display
- ❑ Geometric Rectification
- ❑ Image Mosaicking
- ❑ Radiometric Corrections
- ❑ Raster GIS Modeling
- ❑ Hardcopy Map Comp./Anno.
- ❑ Filtering
- ❑ Supervised Classification
- ❑ Image Enhancement
- ❑ Spatial Filtering
- ❑ Fourier Analysis
- ❑ Multivariate/Statistical Analysis
- ❑ Radar Geocoding & Analysis
- ❑ Principal Components Analysis
- ❑ Density Slicing
- ❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: "TGIS" is a custom program designed to facilitate outside plant management for telecommunications and other related industries.

PRODUCT NAME: TNTmips (The Map and Image Processing System)

COMPANY/ORGANIZATION

Company Name: MicroImages, Inc.
Contact Person(s): Terry Peterson
Street Address: 201 N. 8th St.
City, State: Lincoln, NE
Zip, Country: 68508-1347, USA
Phone: 402-477-9554
Fax: 402-477-9559
Email: info@microimages.com

1. **Type of product:**
   ■ GIS ■ Image Processing ❑ AM/FM ■ CAD ■ Other:Desktop cartography relational dB

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◆ No
4. **Basic (minimal) software system cost:** US $3000 for MS Windows; US $10000 for Workstations
5. **Complete (fully capable) software system cost:** US $3000

USER BASE

6. **Total number of licensed users:** 1500
7. **Number of licensed users by continent:**
   Africa: 100
   Asia: 40
   Australia: 80
   Europe: 120
   North America: 1160
   South America: 100
8. **Year of first installation:** 1986

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other: 4 times per year
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other: $800/yr North Am. $1000/yr others

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ■ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ■ Russian ■ Spanish ❑ Other:
16. **Online help:** ❑ Basic ■ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ❑ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other: totally interact windows

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ■ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:
    If UNIX/X-Windows, list vendors and window managers supported: SUN (Solaris 1.x and 2.x), SGI IRIS, HP HPUX, IBM AUX 3.x and 4.x, Data General DGUX, DEC ULTRIX and OSF.
19. **Minimum hardware configuration:** Standard PC with 16MB, Workstation with 16MB.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	most all	
■ Frame Grabbers:	Targa boards and others via "Twain"	
■ Scanners:	All with Twain drivers	
■ GPS:	via dBase import	
■ CD-ROM:	any supported by system	
■ Diskette:	any supported by system	
■ Tape:	8mm and open reel CCT	
■ Displays:		Any which work with the platforms and OSs supported
■ Film Recorders:		Via TIFF and TARGA
■ Electrostatic Plotters:		All
■ Pen Plotters:		All with HPGL
■ Ink Jet Printers:		All of any size via PostScript and Windows drivers
■ Laser Printers:		All of any size via PostScript and Windows drivers
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No

25. Data Base File Types Supported: ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: many for rasters, topological vectors, CAD, TINs, dB

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ■ Topographical Structuring
- ■ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ■ Raster-Vector Conversion
- ■ Edgematching
- ■ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ■ Surface Modeling
- ■ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ■ Image Mosaicking
- ■ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ■ Filtering
- ■ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ■ Fourier Analysis
- ■ Multivariate/Statistical Analysis
- ■ Radar Geocoding & Analysis
- ■ Principal Components Analysis
- ■ Density Slicing
- ■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Many. Detailed brochures available on request.

PRODUCT NAME: TracTrix

COMPANY/ORGANIZATION

Company Name: Trix Systems, Inc.
Contact Person(s): Chris Sweetnam
Street Address: 68 Smith St.
City, State: Chelmsford, MA
Zip, Country: 01824, USA
Phone: 800-326-4443 or 508-256-4445
Fax: 508-256-9593
Email: sweetnam@trixsystems.com

1. **Type of product:**
   ❑ GIS ■ Image Processing ❑ AM/FM ■ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ❑ Site ❑ Other: $130-950
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ♢ Yes ◆ No
4. **Basic (minimal) software system cost:** $130
5. **Complete (fully capable) software system cost:** $950

USER BASE

6. **Total number of licensed users:** >2,500
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1992

SUPPORT/UPDATES

9. **Training available:** ❑ Courses ❑ Videos ❑ Tutorials ■ Other: Consulting
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ❑ Other:
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ❑ Included in License or Maintenance Contract ■ Other:

DOCUMENTATION/INTERFACE

14. System documentation available as: ■ Hardcopy ■ Electronic Files

15. Languages available: ❑ Arabic ❑ Bengali ■ English ❑ French
■ German ❑ Hindi ❑ Japanese ❑ Mandarin
❑ Portuguese ❑ Russian ❑ Spanish ■ Other: Swedish

16. Online help: ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A

17. User interface: ❑ Command Line ■ Menus ❑ User-Customizable Menus
❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. Operating systems supported: ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
■ Windows/NT ■ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
❑ VAX/VMS ❑ Other:_____

19. Minimum hardware configuration: not reported

20. Devices supported:

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
■ Scanners:	TWAIN and others	
❑ GPS:	_____	
❑ CD-ROM:	_____	
❑ Diskette:	_____	
❑ Tape:	_____	
❑ Displays:		_____
❑ Film Recorders:		_____
■ Electrostatic Plotters:		_____
■ Pen Plotters:		_____
■ Ink Jet Printers:		_____
■ Laser Printers:		_____
❑ Others:	_____	_____

21. Source code available: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
◊ No

22. Batch capability: ◆ Yes ◊ No

23. Linkable libraries for data structure access: ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
❑ Pascal ❑ Other:_____
◊ No

24. Integrated Data Base Management System: ◊ Yes ◊ No

25. Data Base File Types Supported: ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
❑ Sybase ❑ Other:_____

26. Data Exchange Formats Supported: Many raster formats

27. If GIS Product: ❑ Vector ❑ Raster

28. GIS Functionality:

❑ Map Digitizing
❑ Digital Map Editing
❑ Topographical Structuring
❑ Network Flow Analysis
❑ Cell-based (Raster) Modeling
❑ Map Composition/Generation
■ Raster-Vector Conversion
❑ Edgematching

❑ Map Display & Query
❑ Change Map Projections
❑ Datum Changes
❑ Vector Overlay Analysis
❑ Surface Modeling
❑ Buffer generation
❑ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
❑ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
❑ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◊ Yes ◊ No

31. Expert system capability: ◊ Yes ◊ No

32. Spatial index supported: ◊ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◊ No

Please describe additional features: Trix Systems, Inc. provides software applications for automatic paper- to-CAD (raster to vector) conversion, scanning, viewing, redlining, image file format conversion (including vector to raster), network based engineering document management and facilities management.

PRODUCT NAME: TRANSCAD

COMPANY/ORGANIZATION

Company Name: Caliper Corporation
Contact Person(s): Graham Barrowman
Street Address: 1172 Beacon Street
City, State: Newton, MA
Zip, Country: 02161-9926, USA
Phone: 617-527-4700
Fax: 617-527-5113
Email: graham@caliper.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $2995
5. **Complete (fully capable) software system cost:** $10,000

USER BASE

6. **Total number of licensed users:** N/A
7. **Number of licensed users by continent:**
   Africa: N/A
   Asia: N/A
   Australia: N/A
   Europe: N/A
   North America: N/A
   South America: N/A
8. **Year of first installation:** 1989

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: Annual maintenance fee
12. **Software updates:** ❑ Annually ❑ Semiannually ■ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ■ Other: toolbar/toolbox

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:
19. **Minimum hardware configuration:** 80486, 8 MB RAM, CD-ROM drive
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Wintab compliant	
❑ Frame Grabbers:		
■ Scanners:	Windows compliant	
■ GPS:	Trimble mobile GPS	
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		High resolution
❑ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		Any Windows compliant output device
■ Ink Jet Printers:		
■ Laser Printers:		
■ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ■ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ■ Lotus ■ Oracle ■ Paradox ❑ Progress
    ■ Sybase ■ Other: Any ODBC compliant DBMS
26. **Data Exchange Formats Supported:** ARC/INFO, MAP/INFO, ATLAS, DXF, OS NTF
27. **If GIS Product:** ■ Vector ■ Raster
28. **GIS Functionality:**

■ Map Digitizing
■ Digital Map Editing
■ Topographical Structuring
■ Network Flow Analysis
❑ Cell-based (Raster) Modeling
■ Map Composition/Generation
❑ Raster-Vector Conversion
❑ Edgematching

■ Map Display & Query
■ Change Map Projections
■ Datum Changes
■ Vector Overlay Analysis
■ Surface Modeling
■ Buffer generation
■ Line-of-Sight Analysis
❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display
❑ Geometric Rectification
■ Image Mosaicking
❑ Radiometric Corrections
❑ Raster GIS Modeling
■ Hardcopy Map Comp./Anno.
❑ Filtering
❑ Supervised Classification

❑ Image Enhancement
❑ Spatial Filtering
❑ Fourier Analysis
❑ Multivariate/Statistical Analysis
❑ Radar Geocoding & Analysis
❑ Principal Components Analysis
❑ Density Slicing
❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: GIS development kit - supports the creation of map server applications, macro programs and custom user interfaces. Support for OLE 2.0 and open database connectivity (ODBC).

PRODUCT NAME: VISTA

COMPANY/ORGANIZATION

Company Name: DATRON/TRANSCO, Inc.
Contact Person(s): Jacques Huyghes
Street Address: 1500 Buckeye Drive
City, State: Milpitas, CA
Zip, Country: 95035, USA
Phone: 408-432-3400
Fax: 408-433-0965
Email: jhuyghe@i2s.com

1. **Type of product:**
   ❑ GIS ■ Image Processing ❑ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ❑ User ■ System ■ Site ■ Other: networked floating licenses
   License fee is: ■ One Time Charge ■ Other Charge: maintenance
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** $6,000
5. **Complete (fully capable) software system cost:** $18,000

USER BASE

6. **Total number of licensed users:** 1500
7. **Number of licensed users by continent:**
   Africa: 100
   Asia: 500
   Australia: 20
   Europe: 200
   North America: 600
   South America: 80
8. **Year of first installation:** 1975

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ■ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ■ Included in License ■ Other: yearly fee
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ■ French
    ❑ German ❑ Hindi ■ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ■ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ■ Command Line ■ Menus ❑ User-Customizable Menus
    ■ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: SUN, HP, SGI
19. **Minimum hardware configuration:** 32MB RAM, 200MB disk space, (110 SLQ, 100 SWAP)
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	mouse, Calcomp, Altek, Summagraphic	
■ Frame Grabbers:	Workstation dependent	
■ Scanners:	all TIFF, PostScript, BIL, BSQ types	
■ GPS:	support for ASCII, XYZ files	
■ CD-ROM:		
❑ Diskette:		
■ Tape:	8mm, 9 track, 1/4 QIC	
■ Displays:		All Windows
■ Film Recorders:		All TIFF and PostScript
■ Electrostatic Plotters:		All TIFF and PostScript
■ Pen Plotters:		All TIFF and PostScript
■ Ink Jet Printers:		All TIFF and PostScript
■ Laser Printers:		All TIFF and PostScript
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◆ Yes: ■ C ❑ C++ ■ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◊ Yes ◆ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ❑ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** ERDAS, BIC, BSQ, TIFF, DXF
27. **If GIS Product:** ❑ Vector ■ Raster

28. GIS Functionality:

- ■ Map Digitizing
- ■ Digital Map Editing
- ❑ Topographical Structuring
- ❑ Network Flow Analysis
- ■ Cell-based (Raster) Modeling
- ■ Map Composition/Generation
- ❑ Raster-Vector Conversion
- ■ Edgematching
- ❑ Map Display & Query
- ■ Change Map Projections
- ■ Datum Changes
- ■ Vector Overlay Analysis
- ❑ Surface Modeling
- ❑ Buffer generation
- ■ Line-of-Sight Analysis
- ■ Map Joining

29. Image Processing Functionality:

- ■ Interactive Display
- ■ Geometric Rectification
- ■ Image Mosaicking
- ■ Radiometric Corrections
- ■ Raster GIS Modeling
- ■ Hardcopy Map Comp./Anno.
- ■ Filtering
- ■ Supervised Classification
- ■ Image Enhancement
- ■ Spatial Filtering
- ■ Fourier Analysis
- ■ Multivariate/Statistical Analysis
- ■ Radar Geocoding & Analysis
- ■ Principal Components Analysis
- ■ Density Slicing
- ■ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: not reported

PRODUCT NAME: VTRAK for Open Systems

COMPANY/ORGANIZATION

Company Name: Laser-Scan
Contact Person(s): Paul Hardy
Street Address: Cambridge Science Park, Milton Road
City, State: Cambridge
Zip, Country: CB4 4FY, UK
Phone: 44-01223-420414
Fax: 44-01223-420044
Email: paul@lsl.co.uk

1. **Type of product:**
   ❑ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: map data capture

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◆ Yes ◊ No
4. **Basic (minimal) software system cost:** not reported
5. **Complete (fully capable) software system cost:** not reported

USER BASE

6. **Total number of licensed users:** not reported
7. **Number of licensed users by continent:**
   Africa:
   Asia:
   Australia:
   Europe:
   North America:
   South America:
8. **Year of first installation:** 1990

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: maintenance contract
12. **Software updates:** ■ Annually ❑ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ❑ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ❑ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ■ Other: function buttons, trackball

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: Sun SunOS and Motif; Sun Solaris 2 and Motif; DEC Alpha UNIX and Motif; IBM AIX and Motif; HP UX and Motif; DEC Ultrix and Motif
19. **Minimum hardware configuration:** Workstation and 32MB memory
20. **Devices supported:**

	INPUT	OUTPUT
❑ Digitizers:	_____	
❑ Frame Grabbers:	_____	
■ Scanners:	TIFF, Scitex, Scan Graphics	
❑ GPS:	_____	
■ CD-ROM:	_____	
■ Diskette:	_____	
■ Tape:	_____	
■ Displays:		X-terminals
❑ Film Recorders:		_____
❑ Electrostatic Plotters:		_____
❑ Pen Plotters:		_____
❑ Ink Jet Printers:		_____
❑ Laser Printers:		_____
❑ Others:	_____	_____

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph

❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
❑ Sybase ■ Other: INGRES

26. Data Exchange Formats Supported: DXF, ARC/INFO, GIF, TIFF

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	❑ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	■ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
■ Raster-Vector Conversion	❑ Line-of-Sight Analysis
■ Edgematching	❑ Map Joining

29. Image Processing Functionality:

❑ Interactive Display	❑ Image Enhancement
❑ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: Automatic line-following digitizing; automatic height coding; bulk data capture; symbol recognition; text recognition; integration with LAMPS2 object-oriented mapping product

PRODUCT NAME: WinGIS

COMPANY/ORGANIZATION

Company Name: PROGIS
Contact Person(s): DI Walter H. Mayer
Street Address: Italienerstr. 3
City, State: 9500 Villach
Zip, Country: Austria
Phone: 43-4242-26332
Fax: 43-4242-26332-7
Email: 100102.2170@compuserve.com

1. **Type of product:**
   ■ GIS ❑ Image Processing ❑ AM/FM ❑ CAD ■ Other: mapping, geo-multimedia

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   - ◆ **Commercial Product**
     Licensed by: ■ User ❑ System ❑ Site ❑ Other:
     License fee is: ■ One Time Charge ❑ Other Charge: + update
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◊ No
4. **Basic (minimal) software system cost:** 1.495 US $
5. **Complete (fully capable) software system cost:** 6.995 US $

USER BASE

6. **Total number of licensed users:** 600
7. **Number of licensed users by continent:**
   Africa: 4
   Asia: 30
   Australia: 50
   Europe: 200
   North America: 150
   South America: 8
8. **Year of first installation:** 1993

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ■ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: maintenance contract
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ■ Arabic ❑ Bengali ■ English ■ French
    ■ German ❑ Hindi ■ Japanese ❑ Mandarin
    ■ Portuguese ■ Russian ■ Spanish ❑ Other:_____
16. **Online help:** ■ Basic ■ Context Sensitive ■ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ❑ User-Customizable Menus
    ❑ User-Generated Macros ■ Other: WinMAP Development Station (PROGIS SDK)

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ❑ UNIX/X-Windows ■ PC-DOS/Windows ■ Windows95
    ■ Windows/NT ■ MacIntosh ■ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
19. **Minimum hardware configuration:** PC ATZ 486; 8MB RAM; 50 MHz; hard disk depends from project size.
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Aristo, Calcomp, Polarplanimeter ec. Nearly all digitizers which support WinTAB	
❑ Frame Grabbers:		
■ Scanners:	Hybrid systems for loading BMP files	
■ GPS:	link to all GPS receivers which support DDE	
❑ CD-ROM:		
❑ Diskette:		
❑ Tape:		
■ Displays:		14" monitor +
■ Film Recorders:		AVI format
■ Electrostatic Plotters:		Support of all printers and plotters which have Windows drivers
■ Pen Plotters:		Windows driver
■ Ink Jet Printers:		Windows driver
■ Laser Printers:		Windows driver
❑ Others:		

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◊ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◊ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ■ dBase ❑ Foxbase ❑ IMS ❑ INFO ■ Intergraph

■ Lotus ■ Oracle ■ Paradox ■ Progress
■ Sybase ■ Other: AS/400; DB 2; SQL

26. Data Exchange Formats Supported: yes

27. If GIS Product: ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
■ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	■ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
■ Map Composition/Generation	■ Buffer generation
❑ Raster-Vector Conversion	■ Line-of-Sight Analysis
❑ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
■ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
■ Raster GIS Modeling	■ Radar Geocoding & Analysis
■ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◊ Yes ◆ No

33. Object Oriented Architecture: ◆ Yes ◊ No

Please describe additional features: contact company

PRODUCT NAME: Xcable

COMPANY/ORGANIZATION

Company Name: Tekla Oy
Contact Person(s): Risto Sajaniemi
Street Address: Koronakatu 1
City, State: 02210 Espoo
Zip, Country: Finland
Phone: 358-0-8879500
Fax: 358-0-8039489
Email: rs@tekla.fi

1. **Type of product:**
   ■ GIS ❑ Image Processing ■ AM/FM ❑ CAD ❑ Other:_____

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   - ◆ **Commercial Product**
     Licensed by: ■ User ❑ System ❑ Site ❑ Other:_____
     License fee is: ■ One Time Charge ❑ Other Charge:_____
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◊ No
4. **Basic (minimal) software system cost:** available on request
5. **Complete (fully capable) software system cost:** available on request

USER BASE

6. **Total number of licensed users:** 70
7. **Number of licensed users by continent:**
   Africa:_____
   Asia:_____
   Australia:_____
   Europe: 70
   North America:_____
   South America:_____
8. **Year of first installation:** 1992

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:_____
10. **Software support available:** ❑ Worldwide ❑ Not Available ■ Other: Europe
11. **Cost of support:** ❑ Included in License ■ Other: maintenance agreement
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:_____
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:_____

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: HP, VUEWM, MWM
19. **Minimum hardware configuration:** UNIX-workstation/x-terminal, disk 2MB, dat-drive
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Calcomp etc.	
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		HP, Calcomp, etc.
■ Ink Jet Printers:		Calcomp, HP, Canon, etc.
■ Laser Printers:		Canon, HP, etc.
■ Others:	Calcomp, drawing-master	

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** DXF, FINGIS, several raster formats
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
■ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Xcable is a network planning and management software for fixed telecom networks. All functionality is graphics-oriented, for example, modelling and planning of the network structure. All the data is stored in an Oracle-database.

PRODUCT NAME: Xpower

COMPANY/ORGANIZATION

Company Name: Tekla Oy
Contact Person(s): Risto Sajaniemi
Street Address: Koronakatu 1
City, State: 02210 Espoo
Zip, Country: Finland
Phone: 358-0-8879500
Fax: 358-0-8039489
Email: rs@tekla.fi

1. **Type of product:**
   ■ GIS ❑ Image Processing ■ AM/FM ❑ CAD ❑ Other:

LICENSING/PRICING

2. **Is the product public domain *or* commercial?**
   ◆ **Commercial Product**
   Licensed by: ■ User ❑ System ❑ Site ❑ Other:
   License fee is: ■ One Time Charge ❑ Other Charge:
3. **Turnkey system available (bundled hardware & software):** ◊ Yes ◊ No
4. **Basic (minimal) software system cost:** available on request
5. **Complete (fully capable) software system cost:** available on request

USER BASE

6. **Total number of licensed users:** 500
7. **Number of licensed users by continent:**
   Africa: 50
   Asia: 50
   Australia:
   Europe: 350
   North America: 50
   South America:
8. **Year of first installation:** 1987

SUPPORT/UPDATES

9. **Training available:** ■ Courses ❑ Videos ❑ Tutorials ❑ Other:
10. **Software support available:** ❑ Worldwide ❑ Not Available ❑ Other:
11. **Cost of support:** ❑ Included in License ■ Other: maintenance agreement
12. **Software updates:** ❑ Annually ■ Semiannually ❑ Other:
13. **Cost of updates:** ■ Included in License or Maintenance Contract ❑ Other:

DOCUMENTATION/INTERFACE

14. **System documentation available as:** ■ Hardcopy ■ Electronic Files
15. **Languages available:** ❑ Arabic ❑ Bengali ■ English ❑ French
    ❑ German ❑ Hindi ❑ Japanese ❑ Mandarin
    ❑ Portuguese ❑ Russian ❑ Spanish ❑ Other:_____
16. **Online help:** ❑ Basic ■ Context Sensitive ❑ Hypertext ❑ N/A
17. **User interface:** ❑ Command Line ■ Menus ■ User-Customizable Menus
    ❑ User-Generated Macros ❑ Other:_____

TECHNICAL/FUNCTIONAL

18. **Operating systems supported:** ■ UNIX/X-Windows ❑ PC-DOS/Windows ❑ Windows95
    ❑ Windows/NT ❑ MacIntosh ❑ PC-OS/2 ❑ OS/2 WARP
    ❑ VAX/VMS ❑ Other:_____
    If UNIX/X-Windows, list vendors and window managers supported: HP, vuewm, mwm
19. **Minimum hardware configuration:** UNIX-workstation/x-terminal, disk 2MB, dat-drive
20. **Devices supported:**

	INPUT	OUTPUT
■ Digitizers:	Calcomp etc.	
❑ Frame Grabbers:		
❑ Scanners:		
❑ GPS:		
■ CD-ROM:		
■ Diskette:		
■ Tape:		
■ Displays:		
❑ Film Recorders:		
■ Electrostatic Plotters:		
■ Pen Plotters:		HP, Calcomp, etc.
■ Ink Jet Printers:		Calcomp, HP, Canon, etc.
■ Laser Printers:		Canon, HP, etc.
■ Others:	Calcomp, drawing-master	

21. **Source code available:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN ❑ Pascal ❑ Other:_____
    ◆ No
22. **Batch capability:** ◆ Yes ◊ No
23. **Linkable libraries for data structure access:** ◊ Yes: ❑ C ❑ C++ ❑ FORTRAN
    ❑ Pascal ❑ Other:_____
    ◆ No
24. **Integrated Data Base Management System:** ◆ Yes ◊ No
25. **Data Base File Types Supported:** ❑ dBase ❑ Foxbase ❑ IMS ❑ INFO ❑ Intergraph
    ❑ Lotus ■ Oracle ❑ Paradox ❑ Progress
    ❑ Sybase ❑ Other:_____
26. **Data Exchange Formats Supported:** DXF, FINGIS, several raster formats
27. **If GIS Product:** ■ Vector ■ Raster

28. GIS Functionality:

■ Map Digitizing	■ Map Display & Query
■ Digital Map Editing	■ Change Map Projections
❑ Topographical Structuring	❑ Datum Changes
❑ Network Flow Analysis	❑ Vector Overlay Analysis
❑ Cell-based (Raster) Modeling	❑ Surface Modeling
❑ Map Composition/Generation	❑ Buffer generation
❑ Raster-Vector Conversion	❑ Line-of-Sight Analysis
❑ Edgematching	■ Map Joining

29. Image Processing Functionality:

■ Interactive Display	❑ Image Enhancement
■ Geometric Rectification	❑ Spatial Filtering
❑ Image Mosaicking	❑ Fourier Analysis
❑ Radiometric Corrections	❑ Multivariate/Statistical Analysis
❑ Raster GIS Modeling	❑ Radar Geocoding & Analysis
❑ Hardcopy Map Comp./Anno.	❑ Principal Components Analysis
❑ Filtering	❑ Density Slicing
❑ Supervised Classification	❑ Unsupervised Classification

30. Multi-user Capability: ◆ Yes ◊ No

31. Expert system capability: ◊ Yes ◆ No

32. Spatial index supported: ◆ Yes ◊ No

33. Object Oriented Architecture: ◊ Yes ◆ No

Please describe additional features: Xcable is a network planning and management software for electric utility networks. All functionality is graphics-oriented, for example, modelling and planning of the network structure. All the data is stored in a relational database.